

CORNELL UNIVERSITY OFFICIAL PUBLICATION

ANNUAL REPORT

OF PRESIDENT

EDMUND EZRA DAY

FOR THE YEAR

1939-40

With Appendices containing a Summary of
Financial Operations and Reports of
the Deans and other Officers

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REPORT OF THE PRESIDENT FOR 1939-1940

To the Board of Trustees of Cornell University:

I have the honor to present the following report on the University for the third year of the present administration — the academic year 1939-40. Accompanying appendices provide interesting and more detailed reports for the same period from the deans of the several colleges and the heads of the independent departments and offices. The full report of the Treasurer of the University is available in another volume.

THE YEAR ONE OF UNEXPECTED NORMALITY

The academic year 1939-40 opened shortly after the outbreak of war in Europe. It was generally thought that the affairs of the University would be considerably disturbed by the repercussions of the appalling world situation. It was surprising, therefore, that the year at the University turned out to be so normal. In terms of student enrollment, educational outcomes, and general campus atmosphere, the war in Europe and the Far East had no seriously upsetting effects. On the contrary, the greater seriousness of attitude and earnestness of effort which pervaded the student body made for an unusually satisfactory period of academic accomplishment.

The number of degrees granted during the year, 1581, was the highest on record. The number granted by the University as a whole and by the individual colleges and schools within the University is shown for the past three years in Table A. The most substantial increase in any one division of the University was in the College of Arts and Sciences. It will be noted that the number of advanced degrees awarded through the Graduate School showed relatively little change.

TABLE A. NUMBER OF DEGREES GRANTED, BY COLLEGES AND SCHOOLS, 1937-38, 1938-39, AND 1939-40

<i>College or School</i>	<i>1937-38</i>	<i>1938-39</i>	<i>1939-40</i>
Entire University	1446	1493	1581
Arts and Sciences	383	404	441
Engineering	156	148	158
Agriculture	237	254	268
Home Economics	89	87	104
Hotel Administration	43	49	44
Veterinary Medicine	31	40	43
Architecture	24	25	14
Law	49	53	55
Medicine	66	63	70
Graduate School: Masters	237	241	253
Doctors	131	130	131

The number of students enrolled in the University in 1939-40 again showed a moderate increase. The total number — 7174 — was once more the largest in the history of the institution. The figures for the University as a whole, as well as for the separate colleges and schools, for the past ten years are shown in Table B.

TABLE B. NUMBER OF STUDENTS ENROLLED, BY COLLEGES AND SCHOOLS IN THE ACADEMIC YEARS 1930-31 TO 1938-39 INCLUSIVE

(Excluding Short Courses and Summer Session)

	<i>Entire University excluding duplicates</i>	<i>Arts & Sci.</i>	<i>Separate Colleges and Schools</i>								
			<i>Eng.</i>	<i>Arch.</i>	<i>Agr.</i>	<i>Home Econ.</i>	<i>Hotel</i>	<i>Vet.</i>	<i>Law</i>	<i>Med.</i>	<i>Grad.</i>
1930-31	6156	2021	1046	181	831	419	176	162	142	248	1020
1931-32	6271	1920	969	173	969	409	197	214	127	243	1139
1932-33	6167	1944	935	172	964	444	188	175	118	254	1044
1933-34	5947	1894	860	162	1064	468	166	179	143	284	791
1934-35	5910	1823	827	161	1172	454	194	157	144	288	753
1935-36	6019	1825	812	151	1257	441	209	131	162	290	816
1936-37	6341	1883	938	135	1358	417	254	151	156	299	935
1937-38	6684	1980	1025	129	1513	449	271	154	149	289	955
1938-39	7055	1886	1145	136	1616	479	291	163	186	288	1050
1939-40	7174	1827	1269	140	1651	479	326	164	207	296	1000

The year 1939-40 was marked by two important anniversaries, which were celebrated in appropriate exercises. The one hundredth anniversary of the birth of Robert Henry Thurston occurred on October 25, 1939. A distinguished company of institutional heads and outstanding engineers were in attendance at a program which consisted of a series of commemorative addresses in Bailey Hall in the morning, followed by an informal luncheon in the Memorial Room of Willard Straight Hall. The following representatives of the institutions with which Thurston was connected during his career joined in the program: Rear Admiral Wilson Brown of the United States Naval Academy, President Harvey Nathaniel Davis of Stevens Institute of Technology, and Vice-President James Pickwell Adams of Brown University. Dr. William Frederick Durand, Professor Emeritus of Stanford University, formerly an associate of Professor Thurston's at Cornell, and Dean S. C. Hollister also made splendid contributions to the program. A portrait of Dr. Thurston, the gift of Trustee Bancroft Gherardi, was presented to the University. Altogether the exercises brought an inspiring recognition of the immeasurable contributions which Robert Thurston made to the establishment of engineering education throughout this country, and especially at Cornell.

The second anniversary which came during the year was the seventy-fifth anniversary of the signing of the charter of the University. This occurred April 27, 1940. The anniversary was observed in brief exercises in Myron Taylor Hall, at which the John Stambaugh Professor of History, Carl Becker, delivered a notable address on

"The Cornell Tradition: Freedom and Responsibility." The exercises were attended by members of the Board of Trustees, of the University Faculty, and of the campus community. Professor Becker's address has since been printed and widely distributed. It is a document which should be read by all Cornellians. It gives a heart-warming account of the faith in which this University was founded, and in which it will always carry on. On the basis of both substance and form, the commemorative address is assured of a place among the classics in which the tradition of Cornell has been permanently inscribed.

These two anniversaries naturally turned the thoughts of the University toward the past. From this past, all Cornellians can draw reassurance and inspiration. But with current events taking the course which they did during the year, the thoughts of the University were bound to be directed in large measure to the future. By the end of the year, it was clear that the life of the nation was going to be forced into profoundly important changes. These changes would inevitably have an impact upon the life of the University. Day by day since the close of the year, the necessity of reorientation in the undertakings of the University has become clearer. Thus it would seem as if the year 1939-40 was a year in which the University quietly continued its steady growth and development between a past that is secure in seventy-five years of outstanding achievement and a future which is beset by unprecedented and unpredictable complexities. Unquestionably the close of the year 1939-40 marked a point at which the need was for the marshalling of all available resources of the University for the demanding years immediately ahead.

IMPROVEMENTS IN THE UNIVERSITY'S ORGANIZATION

A time such as this places a high premium upon measures designed to increase the effectiveness with which the University can deliver the power that lies at its disposal. Consequently further efforts were made during the year to raise the University's organization to a higher level of efficiency. To some extent this endeavor was a natural outgrowth of the comprehensive revision of the University statutes which was brought to completion at the June 1940 meeting of the Board. The critical reexamination of the statutes—there having been no comprehensive revision for more than two decades—gave rise to a number of pointed questions about existing administrative arrangements and procedures. Several important changes of organization were initiated as a direct result of this thorough overhauling of the existing statutes.

One of the most important innovations which stemmed directly from the revision of the statutes was the creation of a new standing committee of the Board of Trustees. This committee was created to deal with the general problem of the relation of the University to the constituted public authorities. As a land-grant institution, Cornell University has from the outset had important relations with both the federal and the state governments. When the University, at the request of the

State, accepted responsibility for the administration of the three State Colleges of Veterinary Medicine, Agriculture, and Home Economics, the dealings of the University with the State authorities at Albany naturally became close and extensive. More and more the University is drawn into cooperative undertakings with the state and federal authorities, and more and more the University finds itself vitally affected by undertakings of government at all levels. With so many phases of the work of the University involving these relationships with the constituted authorities, the establishment of a standing committee of the Board for continuing work in this area seemed clearly desirable. The administration of the University is confident that this new standing committee will have important contributions to make to a wise direction of the University's affairs.

Another important move made in connection with the revision of the statutes took the form of a rather complete reorganization of the different college councils. Two of these — the State College Council and the Medical College Council — had at times functioned very nearly as standing committees of the Board. In large measure, they had functioned for the full Board in the administrative procedures of the three State Colleges and the Medical College in New York City respectively. Under the revised statutes, the handling of administrative procedures in the State Colleges and in the Medical College will from now on be essentially like that in the other colleges and schools of the University. The college councils henceforth will be advisory in their functions, assisting both trustees and the administration of the University in the careful formulation of policy and general program of the individual college or school to which the individual council is attached. The membership of the councils has been amended so as to make them more directly representative of the various interests which are involved in the work of the several colleges and schools of the University. The administration is convinced that the several councils, as now constituted, can assume an important share of the fundamental responsibility of determining the general policies under which the further strengthening of the University's work can best be comprehended.

One of the most important improvements made during 1939-40 in the organization of the University's work was the establishment of a new Board on Student Health and Hygiene. This new Board, like the one constituted in 1938-39 for Physical Education and Athletics, brings together representatives of the administration, the Board of Trustees, the University faculty, and the undergraduate students. Under the Board of Trustees and President of the University, the new Board on Student Health and Hygiene has full authority to deal with all phases of the University's program affecting the health of the student body.

One of the first recommendations made by the Board on Student Health and Hygiene had to do with the general organization of the student health service. The policy hitherto in effect was one of refer-

ring promptly all cases of student illness to the established practitioners in the local community, the University confining its service to an advisory treatment of ambulatory cases and the operation of the infirmary, through which the local practitioners were expected to handle such sick students as came to their individual attention. Any student who was advised to secure the services of a physician was free to select whatever local practitioner he or she chose. In short, the University did not accept responsibility for the medical care of sick students.

A special committee of the Board of Trustees undertook a survey of the student health situation early in the year 1939-40 and raised certain questions looking toward possible improvements of the service. This committee, however, went no further than to recommend the establishment of the new Board on Student Health and Hygiene, and to propose that this Board give attention to the questions posed by the committee. It was the new Board on Student Health and Hygiene, therefore, that recommended the reorganization of the health service. Plans for this reorganization were fully developed late in the academic year. Under the new arrangements, the University will go much further than before in providing actual medical care. A full-time Physician-in-Chief and Clinical Director, Dr. Norman S. Moore, was appointed. Three full-time residents at the Infirmary are to be added to the staff. The full-time members of the University's staff will not expect to take care of all types of cases at the Infirmary, but will have access to the services of specialists in outside practice as these services may be necessary. The local practitioners have asked to serve as members of the surgical, medical, and specialist staffs, and have since been appointed. The essential fact is that the University, under the new arrangements, will assume full responsibility for the medical care of sick students. This will not, however, prevent any student from choosing some outside practitioner if he or she so elects.

A change which might not, on the surface, appear important but nevertheless is of first-rate significance was made during the year in the action of the Board in June providing that the Dean of the University Faculty shall hereafter be a full-time administrative officer. From the beginning of the University, the University Faculty has had major responsibilities in all matters relating to the educational policies and educational program of the University. These responsibilities loom even larger in these days in which educational programs are being sharply challenged, and in many places radically reorganized. It is fortunate indeed that the organization of Cornell has always provided for full participation of the University Faculty in the direction of the educational activities of the institution. It is with a view to strengthening this participation of the University Faculty that the Dean of that Faculty has now been put on a full-time basis. It is expected that this change will be of material aid to the administration in dealing with many of the important educational problems with which all institutions of higher learning are now confronted.

Still another important change made in the University's operations

during the year had to do with the University's broadcasting station. For the past few years the greater part of the time of this station has been leased to the Elmira Star Gazette. In view of the increasing importance of broadcasting in college and university undertakings, it was decided to bring the University's station more completely under University control. With the consent of the Star Gazette, the existing contract with the newspaper was terminated as of June 2, 1940. A new full-time director of the station, Mr. Michael Hanna, was appointed and, under his direction, the necessary operating and commercial staff secured. Subsequently arrangements were made with the Ithaca Savings Bank under which thoroughly modern studios for the station will shortly be available on the top floor of the Savings Bank Building. Already an improvement in the program of the station has been effected, and the activities of the station will doubtless from now on be more and more articulated with other interests of the University. The call number of the station has been changed to WHCU and an effort is being made to secure a franchise under which the station can be operated at all hours.

An important change in the work of the Reserve Officers Training Corps was made during the year. During recent years, this Corps has provided training in both Field Artillery and Infantry, with a more restricted offering in Signal Corps and Ordnance. There has been an increasing disposition on the part of the students to elect Field Artillery instead of Infantry, with the result that difficulties have been experienced in filling the full roster of the Infantry unit. In order to give the students more clearly what they preferred in the required program of training, it was finally decided to drop the Infantry unit and to make the R.O.T.C. program primarily one in Field Artillery, the more limited offering in Signal Corps and Ordnance being retained. This change has had the full approval of the War Department, and will contribute to a more effective University R.O.T.C. in the current national defense program.

Early in the year there were indications that the local CCC Camp might be withdrawn as a result of the projected reduction of Federal appropriations for the Civilian Conservation Corps. Every effort was made to persuade the Federal authorities that this Camp should be retained in view of the important contributions it has been making to the development of the University Arboretum—a project of great interest, naturally, to the New York State College of Agriculture. Happily, as a result of the maintenance of funds available to the Civilian Conservation Corps, no reduction in the number of camps was finally ordered, so that the local camp is still in full operation. It is to be hoped that it will remain so, for the contributions it has been able to make through its work program in the Arboretum have been of large consequence both to the University and to all those interested in the natural resources of this region.

Early in the year a thorough re-examination of plans for the new Engineering College buildings was undertaken, with the result that

an alternative site came to be viewed more and more favorably. This site lies at the south end of the campus between Barton Hall and Hoy Field on the east, Central Avenue on the west, Barnes Hall on the north, and Cascadilla Gorge on the south. Careful study of possible building developments on this site led finally to the conclusion that the contemplated new buildings for the Engineering College could more wisely be located at the south end of the campus than at the north end, where the existing buildings stand. On recommendation of the Committee on Buildings and Grounds, the new site was formally approved by the Board. This change involves radical revision of the earlier campus plan and would indicate that perhaps the time has come for the development of a new plan in which the new Engineering College buildings on the south end site will be an important new feature.

THE PHYSICAL PLANT

The year 1939-40 did not witness any large changes in the physical plant of the University. Perhaps the most important single development of the year was the initiation by the Board's Committee on Buildings and Grounds of a comprehensive study of the present condition of all of the University's buildings. This was with a view to the development of a continuing program for the full conservation of all parts of the existing plant. This long-range protection of the existing plant is unmistakably one of the major responsibilities of the Board of Trustees. It is the special duty of the Committee on Buildings and Grounds to act for the Board in this connection, just as it is the duty of the Finance Committee to act for the Board in the conservation of the University's financial resources. It is quite likely that the findings of the Committee on Buildings and Grounds in its comprehensive study of the present condition of the large number of individual structures on the campus will suggest a program of repairs and replacements which cannot be immediately provided. Nevertheless it seems to be clearly desirable to have a carefully formulated schedule of work that has to be undertaken if the existing physical plant is to be maintained over the years in full efficiency.

In the course of the year 1939-40 three new buildings on the campus were completed and brought into operation. These were the Federal Laboratory for research on nutritional problems related to soils, plants, and animals; the new horse barn for the Department of Animal Husbandry in the New York State College of Agriculture; and the new University service building for the department of food supply and food production. All three of these buildings afford excellent facilities for the types of work for which they have been provided. It is particularly gratifying to have the new work in the Federal Laboratory get under way with such excellent accommodation.

Certain commitments for new construction were made in the course of the year. At the spring meeting of the Board an appropriation of \$75,000 was made for the construction of a high voltage laboratory for the School of Electrical Engineering. This will be constructed just off

Mitchell Street and will entail an extended outside transmission line, as well as a completely insulated structure within which high voltage experiments and tests may be safely conducted. The actual construction of the laboratory will have to await completion of arrangements under which certain industrial concerns will collaborate in the supply of necessary equipment and in a subsequent testing program. It is hoped that plans for the new development may be completed within the next few months.

Still another service building is to be constructed in the course of the next year, this unit taking care of the carpenter and paint shops. This unit will complete the service building development at East Ithaca and will provide all the divisions of the Department of Buildings and Grounds with needed physical accommodation. Each of the service structures which has thus far been built has lifted substantially the efficiency of operations in the department accommodated, and it is confidently expected that the completion of the entire set of service buildings will bring the efficiency of operations throughout the service departments to a level of which the University may well be proud.

Another important item in the improvement of service facilities was nearing completion at the close of 1939-40. This item consisted of new electric generators at the heating plant. These will serve to supplement the hydro-electric plant which has been the sole source of University supply in the past. The generators will make it unnecessary to purchase as much electric current as heretofore and should, over the years, effect a substantial economy.

At the spring meeting of the Board appropriations were made which will make possible much needed alterations in Stimson and McGraw Halls and in Sage Chapel. The alterations in Stimson Hall are designed to give the Department of Zoology more satisfactory facilities, now that all members of the Department have been brought together in Stimson. The alterations in McGraw are expected to provide satisfactorily for the classrooms and offices of the recently-constituted Department of Sociology and Anthropology. The alterations in Sage Chapel entail a considerable extension at the west end of the nave, the installation of a new organ in this extension, and a substantial rebuilding in the basement of the Chapel so that the choir may be adequately accommodated. All of these alterations were greatly needed and will bring much improved facilities to the continuing work of the University.

Despite these additions and improvements of the physical plant, many pressing needs remain. Among the most important of these are the new buildings for the Engineering College, a new building worthy of the University's great library collections, a building for the accommodation of an expanded program in fine arts and architecture, buildings for the Library and Department of Agricultural Engineering of the College of Agriculture, a modern gymnasium with facilities for indoor sport during the extended winter season in which intramural recreational activities are now greatly handicapped. These needs have

been mentioned before and doubtless are already in the minds of the Board. They grow no less pressing and must in time be met if the work of the University is to go forward in full vigor.

FINANCIAL OUTCOMES

The present administration of the University has never accepted the argument that an educational institution is being wisely managed if it shows an operating deficit; that such a deficit makes more effective the institution's appeal for needed financial support. Thus far the present administration has succeeded in its efforts to avoid a deficit; for the third successive year, the University was able on June 30 to show a small operating surplus. The financial record of the year 1939-40 is set forth at length and in detail in the report of the Treasurer.

For several years prior to 1939-40, the University's investments showed a steady decline in the rate of interest earned. With needs of a compelling character constantly pressing for attention, this decline has made difficult indeed the task of keeping expenditures within income. Happily, in 1939-40, the average earnings of the University's pooled investments did not continue the decline of recent years: the rate earned was 4.077%, a slight increase over the earning rate of 4.00% reported for 1938-39. Once again the Finance Committee of the Board guaranteed for budget purposes a return of 4.25%. In order to cover this guarantee, \$46,514.16 had to be withdrawn from the Income Stabilization Fund which the Committee has built up for use in such contingencies. This loss to the Fund was partially offset by the addition of an unused special income reserve amounting to \$29,106.67. While it is to be regretted that such emergency measures are required to offset in part the effects on the University's program of an interest rate substantially lower than that which prevailed a few years ago, some encouragement certainly may be derived from the fact that the earned rate in 1939-40 was a little better than in 1938-39, and the amount which had to be taken from the Income Stabilization Fund to assure a return of 4.25% was substantially less than in the year preceding. It would appear that during 1939-40 the University was appreciably closer to the goal of making its operating budget fully conform to the actual earnings from endowment funds.

Gifts to the University in 1939-40 totaled \$1,104,942.66. Of this sum, \$867,528.94 was in endowment and \$237,413.72 in current funds. Unrestricted gifts received through the Alumni Fund, successor to the Cornellian Council, amounted to \$74,807.61. It is a pleasure to report, comparing 1939-40 with 1938-39, that not only was there an increase in the total unrestricted contribution made to the University through the Alumni Fund, but that the number of contributors also showed a substantial increase. At a time when instability throughout the world makes uncertain the future of the rate of return on invested funds, it is encouraging to see the growing interest of alumni and friends of the University in maintaining the unrestricted revenues in fullest attainable volume.

Of special significance in the work of a great educational institution are large benefactions made for the purpose of strengthening the teaching and research programs. A notable donation of this sort was received during 1939-40. In January 1940, Mr. John Wendell Anderson of Detroit, a student at Cornell in 1885-86, gave to the University \$200,000 for the purpose of endowing a professorship without restriction as to college or department. The Board of Trustees gratefully accepted this gift, and voted that the professorship which it was to endow be named the John Wendell Anderson Professorship. In April 1940, Charles Love Durham, Professor of Latin in the College of Arts and Sciences, was elected the first John Wendell Anderson Professor.

Two interesting new grants were received during the year from the Rockefeller Foundation. In December 1939, the Foundation appropriated \$20,000 to the University to support a state-wide program in music and drama for a period of three years ending December 31, 1942. This grant will provide the full-time salary of the director in music, and will make provision for the preparation of printed materials in both drama and music by members of the staff of the University. The Foundation also appropriated to the University the sum of \$14,000 for the establishment of a program of instruction in Russian Language and Literature. The new instructional offering was made available under an instructorship in the fall of 1939. Arrangements have been completed more recently for the services of an associate professor, beginning with the academic year 1941-42.

In addition to the gifts mentioned above, a substantial number of grants in support of specific research projects were received from educational foundations, scientific societies, industrial organizations, and individuals. A complete list of these invaluable benefactions may be found in Schedule 46 of the report of the Treasurer.

CHANGES IN THE UNIVERSITY FACULTY

It is the sad duty of the Administration to report the following deaths in the course of the year:

Livingston Farrand, President Emeritus of the University, in New York City on November 8, 1939.

Floyd Karker Richtmyer, Professor of Physics and Dean of the Graduate School, in Ithaca on November 7, 1939.

Charles Kellogg Burdick, Professor of Law and former Dean of the Law School, in Ithaca, on June 22, 1940.

Millard Clayton Ernsberger, Professor of Heat-Power Engineering Emeritus, in Ithaca, on January 25, 1940.

John Rogers, Professor of Clinical Surgery Emeritus, in New York City, on November 19, 1939.

John Henry Tanner, Professor of Mathematics Emeritus, in Ithaca, on March 11, 1940.

During the year the following six members of the University Faculty retired on account of age and were given emeritus appointments:

Francke Huntington Bosworth, Professor of Architecture.
Charles Love Durham, Professor of Latin.
Clark Sutherland Northup, Professor of English.
Frederick Clarke Prescott, Professor of English.
Albert Edward Wells, Professor of Mechanic Arts.
Woodford Patterson, Secretary of the University.

The following resignations were presented and accepted during 1939-40:

Cornelius Betten, Director of Resident Instruction in the Colleges of Agriculture and Home Economics.

H. J. Davis, Goldwin Smith Professor of English and Chairman of the Department.

J. E. Knott, Research Professor of Vegetable Crops.

L. H. MacDaniels, Professor of Pomology and Pomologist in the Experiment Station.

Joseph Oskamp, Extension Professor of Pomology.

Norman Cameron, Associate Professor of Psychology in the Medical College in New York City.

R. W. Jackson, Associate Professor of Biochemistry in the Medical College in New York City.

Parker Dooley, Assistant Professor of Pediatrics in the Medical College in New York City.

R. A. Phillips, Assistant Professor of Physiology in the Medical College in New York City.

Alma Scidmore, Assistant Professor of Home Economics.

J. A. Vietor, Assistant Professor of Surgery in the Medical College in New York City.

C. O. Willits, Associate in Research in the Experiment Station.

The following appointments and promotions of University faculty grade were made in the course of the year:

University Administration:

Professor B. S. Monroe, Acting Dean of the Graduate School.

Professor G. H. Sabine, Dean of the Graduate School (from September 1940).

E. K. Graham, Acting Secretary of the University.

E. J. Murphy, Alumni Secretary.

College of Architecture:

Eric Gugler, Associate Professor of Architecture.

E. G. Lawson, Associate Professor of Landscape Architecture.

College of Arts and Sciences:

- Peter Debye, Professor of Chemistry and Chairman of the Department of Chemistry.
M. S. Kendrick, Professor of Economics.
F. F. Stephan, Professor of Sociology.
A. L. Winsor, Professor of Psychology.
A. L. Anderson, Associate Professor of Geology.
R. F. Bacher, Associate Professor of Physics.
R. W. Church, Associate Professor of Philosophy.
W. W. Flexner, Associate Professor of Mathematics.
W. H. French, Associate Professor of English.
P. W. Gates, Associate Professor of History.
B. W. Jones, Associate Professor of Mathematics.
V. S. Lawrence, Associate Professor of Mathematics.
P. E. Mosely, Associate Professor of History.
Edwin Nungezer, Associate Professor of English.
Richard Robinson, Associate Professor of Philosophy.
J. B. Rosser, Associate Professor of Mathematics.
Bruno Rossi, Associate Professor of Physics.
W. M. Sale, Associate Professor of English.
E. J. Simmons, Associate Professor of the Russian Language and Literature (effective 1941-42).
H. R. Smart, Associate Professor of Philosophy.
W. H. Stainton, Associate Professor of Public Speaking.
E. A. Tenney, Associate Professor of English.
C. K. Thomas, Associate Professor of Public Speaking.
R. H. Wagner, Associate Professor of Public Speaking.
B. P. Young, Associate Professor of Zoology.
H. D. Albright, Assistant Professor of Public Speaking.
J. H. Curtiss, Assistant Professor of Mathematics.
F. A. Long, Assistant Professor of Chemistry.
W. C. Senning, Assistant Professor of Zoology.
Richard Parmenter, Assistant Professor of Psychobiology.
D. H. Tombouljian, Assistant Professor of Physics.
P. A. Underwood, Assistant Professor of Fine Arts.
F. W. Watkins, Assistant Professor of Government.
Friedrich Solmsen, Acting Assistant Professor of Classics.

College of Engineering:

- J. N. Goodier, Professor of Mechanics.
M. V. Barton, Assistant Professor of Machine Design.
E. H. Carruthers, Assistant Professor of Metal Processing.
T. R. Cuykendall, Assistant Professor of Civil Engineering.
K. C. White, Assistant Professor of Administrative Engineering.

Medical College:

- D. W. Bronk, Professor of Physiology and Chairman of the Department of Physiology and Biophysics.
J. R. Carty, Professor of Radiology.
F. H. Dixon, Lieut.-Col. M. C., U. S. Army, Professor of Military Science and Tactics.
H. K. Hartline, Associate Professor of Physiology.
Paul Reznikoff, Associate Professor of Clinical Medicine.
Leona Baumgartner, Assistant Professor of Public Health and Preventive Medicine.
H. M. Bergamini, Assistant Professor of Clinical Medicine.
Jacob Buckstein, Assistant Professor of Clinical Medicine.
H. H. Gordon, Assistant Professor of Pediatrics.
K. G. Hansson, Assistant Professor of Clinical Surgery.
R. O. DuBois, Assistant Professor of Clinical Pediatrics.
Milton Helpern, Assistant Professor of Clinical Medicine.
J. P. Hervey, Assistant Professor of Biophysics.
F. C. Hunt, Assistant Professor of Clinical Pediatrics.
M. G. Larrabee, Assistant Professor of Physiology.
G. A. Millikan, Assistant Professor of Physiology.
F. H. Peters, Assistant Professor of Clinical Medicine.
A. J. Rawson, Assistant Professor of Biophysics.
W. H. Summerson, Assistant Professor of Biochemistry.

New York State Veterinary College:

- D. W. Baker, Associate Professor of Parasitology.
E. L. Brunett, Associate Professor of Poultry Diseases.
J. A. Dye, Assistant Professor of Physiology.
M. E. Miller, Assistant Professor of Anatomy.

New York State College of Agriculture:

- A. W. Gibson, Professor of Personnel Administration and Director of Resident Instruction for the Colleges of Agriculture and Home Economics.
M. S. Kendrick, Professor of Public Finance.
L. H. MacDaniels, Professor of Horticulture and Horticulturist in the Experiment Station and Chairman of the Department of Floriculture and Ornamental Horticulture.
G. S. Wehrwein, Acting Professor of Land Economics.
R. W. Cummings, Associate Professor of Soil Technology and Soil Technologist in the Experiment Station.
L. C. Cunningham, Extension Associate Professor of Farm Management.
M. B. Hoffman, Extension Associate Professor of Pomology.
Kenneth Post, Associate Professor of Floriculture and Associate Floriculturist in the Experiment Station.
S. W. Warren, Associate Professor of Farm Management and Investigator in Farm Management in the Experiment Station.

R. K. Cole, Assistant Professor of Poultry Husbandry and Animal Genetics and Assistant Animal Geneticist in the Experiment Station.

I. C. Gunsalus, Assistant Professor of Bacteriology and Assistant Bacteriologist in the Experiment Station.

G. H. M. Lawrence, Assistant Professor of Botany.

R. B. Musgrave, Assistant Professor of Field Crops and Assistant Agronomist in the Experiment Station.

R. C. Ogle, Extension Assistant Professor of Poultry Husbandry.

W. A. Rawlins, Assistant Professor of Entomology and Assistant Entomologist in the Experiment Station.

J. D. Hood, Acting Assistant Professor of Biology.

Arthur J. Mix, Acting Assistant Professor of Plant Pathology.

New York State College of Home Economics:

C. E. Cladel, Assistant Professor of Hotel Accounting.

G. D. Williams, Extension Assistant Professor of Home Economics.

New York State Agricultural Experiment Station at Geneva:

Z. I. Kertesz, Chief in Research.

G. L. McNew, Associate in Research.

C. J. Tressler, Associate in Research.

Department of Hygiene and Preventive Medicine:

Mrs. Ruth Stelle, Assistant Professor and Assistant Medical Adviser.

University Clinic and Infirmary:

Norman S. Moore, Professor of Clinical Medicine and Clinical Director, and Physician-in-Chief.

The Messenger Lectures on the Evolution of Civilization were delivered in 1939-40 by Thomas Downing Kendrick of the British Museum.

The George Fisher Baker Non-Resident Lecturer in Chemistry was Peter Debye, formerly Professor of Physics at the University of Utrecht and later Director of the Kaiser Wilhelm Institute of Physics at Berlin.

CHANGES IN THE BOARD OF TRUSTEES

During 1939-40 the membership of the Board underwent important changes.

The Board suffered an irreparable loss in the death of its chairman, Justin DuPratt White, in Nyack, New York, on July 14, 1939.

Samuel Wiley Wakeman, widely-known former member of the Board, died in New York City on May 8, 1940.

Henry R. Ickelheimer, Walter L. Todd, and Maxwell M. Upson were elected trustees to succeed themselves, each for a term of five years.

Horace White was reappointed a trustee by the Governor of the State for a term of five years.

Walter S. Carpenter, Jr. was elected trustee to fill the unexpired portion of the term of J. DuPratt White, deceased.

Howard E. Babcock was reelected by the New York State Grange as a trustee of the University.

Willis H. Carrier, '01 was elected alumni trustee and George R. Pfann, '24 was reelected alumni trustee, each for a term of five years.

The University Faculty elected Professor George H. Sabine its representative on the Board of Trustees for a term of five years.

The organization of the Board's work was affected during the year by the following actions:

Howard E. Babcock was elected chairman of the Board in succession to J. DuPratt White, deceased.

Mary H. Donlon was elected to membership in the Executive Committee.

Floyd L. Carlisle and Walter S. Carpenter, Jr. were elected members of the Finance Committee; Henry R. Ickelheimer, Maxwell M. Upson, and Walter C. Teagle were reelected members of that Committee.

Ezra B. Whitman was elected Chairman of the Committee on Buildings and Grounds; Thomas I. S. Boak, Maurice C. Burritt, Matthew Carey, and Jervis Langdon were elected members of that Committee.

Edward R. Eastman was elected Chairman of the Committee on Relations with Public Authorities; Mary H. Donlon, George R. Pfann, George R. VanNamee, and Halsey B. Knapp were elected members of that Committee.

Neal D. Becker and Floyd L. Carlisle were elected to membership in the Committee on University Development; Bancroft Gherardi, Walter C. Teagle, and Maxwell M. Upson were elected to succeed themselves on that Committee.

Neal D. Becker was elected to the Joint Administrative Board of the New York Hospital-Cornell Medical College Association to fill the vacancy caused by the death of Trustee J. DuPratt White.

Neal D. Becker, Henry R. Ickelheimer, and Myron C. Taylor were elected members of the Medical College Council.

Dr. Mary M. Crawford was elected by the Board as its Alumni Representative on the Medical College Council.

Harry G. Stutz was elected to the University Library Board.

George R. Pfann and Robert E. Treman were elected to succeed themselves on the Board on Physical Education and Athletics.

Matthew Carey, Mary H. Donlon, and Jervis Langdon were elected to succeed themselves on the Board on Student Health and Hygiene.

Paul A. Schoellkopf was elected to the College of Architecture Council.

Maurice C. Burritt and Bancroft Gherardi were elected the two members of the Board of Trustees on the three newly constituted councils for the State Colleges.

Walter L. Todd was appointed to the Trustee-Faculty Committee on Research.

Alfred H. Hutchinson was elected member and Chairman of the Audit Committee; Paul A. Schoellkopf and Harry G. Stutz were also elected members of that Committee.

Maurice C. Burritt and George H. Rockwell were appointed Chairman and member respectively of the Arboretum Policy Committee.

Harry G. Stutz and Jervis Langdon were elected Chairman and member respectively of the Committee on Portraits and Objects of Art.

Alfred H. Hutchinson, Jervis Langdon, and George H. Rockwell were appointed to the Board of Governors of Willard Straight Hall.

The third year of the present administration made further contributions to that full understanding between trustees and administration which is so essential to the wise promotion of the University's enduring interests. I cannot bring this report to a close without expressing my deep appreciation of the cordial relationships to me which the members of the Board have so uniformly maintained. I am equally appreciative of the increasing activity which the Board members have displayed in the multifold affairs of the University. In the death of J. DuPratt White, as devoted a Cornellian as ever lived, the Board and the University suffered an immeasurable loss. It has been exceedingly gratifying and reassuring to see the Board's work nevertheless move forward in growing effectiveness under the able and inspiring leadership of the new Board chairman.

EDMUND E. DAY,
President.

SUMMARY OF FINANCIAL OPERATIONS

To the President of Cornell University:

A brief summary of the year's operations follows:

The Endowed Colleges at Ithaca had a small operating surplus of \$769.68, after setting aside \$9,000 for allocation by the President to special projects.

The Medical College (a separate accounting unit) again was run, as had been anticipated, at a small deficit, \$7,095.38. This was charged against the surplus of previous years' operations, reducing said surplus to \$29,160.26.

The Colleges of Agriculture, Veterinary Medicine, Home Economics, and the Experiment Station at Geneva each had small operating credit balances.

The Balance Sheet, for the first time, has been made to reflect the cost of the entire educational plant of the University, by the inclusion therein of the properties and equipment of the State Colleges and Experiment Station. These items have been listed, properly segregated, under Plant Assets. It was felt that their inclusion in the University's Balance Sheet will more accurately reflect our educational plant in comparison with our sister institutions.

The operations of the University's consolidated investment account resulted in earnings at the rate of 4.077% on the book value of endowments. This is a slight improvement over the 4.0073% earned for the previous year. Present disturbed world conditions preclude the making of even a wild guess at what we may expect during the current year. As for market values of endowment investments, the depreciation on June 30 was about 19% or \$5,829,596.24 on a total of \$31,015,017.11 book values of endowments. If available reserves are deducted, the depreciation percentage is slightly below 16.

The budgetary rate of 4.25% that was guaranteed by the Finance Committee necessitated a charge of \$46,514.16 against our Income Stabilization account. As a partial offset, an unused special income reserve of \$29,106.67 was credited to this account, effecting a net reduction in this account from \$313,279.55 to \$295,872.06. For the fiscal year 1940-41, the guarantee of the Finance Committee is 4.10% for budgetary purposes.

Gifts and donations for the year totaled \$1,104,942.66. These are listed in detail on page 163 of the Treasurer's Report. Of these, \$627,102.68 were added to endowments, or are being carried as capital sums.

GEORGE F. ROGALSKY, *Treasurer.*

APPENDIX I

REPORT OF THE DEAN OF THE UNIVERSITY FACULTY

To the President of the University:

SIR: I have the honor to present the report of the University Faculty for 1939-40.

The number of persons holding membership in the University Faculty during any part of the year (instructors and assistants are not included) was 798, including 505 in the faculty at Ithaca, 137 in the Medical Faculty in New York City, 54 at the Agricultural Experiment Station at Geneva, N. Y., and 2 at the Agricultural Experiment Station on Long Island. Of this number 41 were emeritus professors at Ithaca, 11 at the Medical College, and 2 at the Geneva Experiment Station.

Five members of the Faculty retired from their official positions at the close of the year. Professors Charles Love Durham, Clark Sutherland Northup, and Frederick Clarke Prescott, all members of the staff since 1897, and Professor Albert Edward Wells, a member since 1904, previously reported as retiring in 1939 but subsequently asked to continue during 1939-40, were transferred to the status of professor emeritus. Mr. Woodford Patterson retired from his position as Secretary under the title Secretary of the University, Emeritus; he will continue as University Publisher. Professor Herbert J. Davis of the faculty at Ithaca and Doctors Norman Cameron, Richard W. Jackson, Robert A. Phillips, John A. Victor, and Parker Dooley of the Medical College resigned during the year.

Six members of the Faculty have died since the last report was made: Floyd Karker Richtmyer, Professor of Physics and Dean of the Graduate Faculty, on November 7, 1939, Livingston Farrand, President Emeritus of the University, on November 8, 1939, John Rogers, Professor of Clinical Surgery, Emeritus, on November 19, 1939, Millard Clayton Ernsberger, Professor of Power Engineering, Emeritus, on January 25, 1940, John Henry Tanner, Professor of Mathematics, Emeritus, on March 11, 1940, and Charles Kellogg Burdick, Professor of Law and former Dean of the Law School, on June 22, 1940.

Fifty-three members of the Faculty were on leave during part or all of the year.

ELECTIONS AND APPOINTMENTS

At the October meeting the Faculty elected Professor R. C. Gibbs to succeed himself as a member of the Heckscher Research Council for a term of four years, beginning November 1. The President announced that he had appointed Professor G. W. Cunningham to the Administrative Board of the Summer Session for four years beginning November 1 in succession to Professor O. D. von Engeln whose term expired, and that he had asked Professor von Engeln to serve on the Board to October 1, 1940, taking the place of Professor W. W. Flexner who is on leave for the year. It was reported that the Board of Trustees had appointed Professor F. A. Southard, jr., to succeed himself as member of the Library Board for a term of five years. At the January session it was announced that the ballot carried on by mail in December had resulted in the election of Professor G. H. Sabine as Faculty Representative in the Board of Trustees for five years beginning January 1, 1940, in succession to Professor R. S. Stevens, term expired, and in the election of Professor G. J. Thompson as member of the Committee on University Policy for the same period, following Professor Jacob Papish, term expired. Professor Sabine also became a member of the Committee on University Policy by virtue of his election as Faculty Representative. Professor F. G. Marcham was reported to have been reelected for

PRESIDENT'S REPORT

a term of three years as member of the Board on Physical Education and Athletics.

BOARD ON STUDENT HEALTH AND HYGIENE

At the January session of the Faculty the President stated that the Board of Trustees had under consideration the formation of a Board on Student Health and Hygiene to be constituted after the pattern of the Board on Physical Education and Athletics. The Faculty voted to approve the plan and it was subsequently announced that such a board had been set up, to be responsible for "the policies and the administration of the program of student health service and hygiene." It is specifically provided that the Board shall exercise general supervision over the University Infirmary and that all questions relating to the curriculum in hygiene and to student absences for illness shall be under the sole authority of a subcommittee of the Board consisting of the chairman of the Board, the President of the University, and the three faculty members. It is also provided that the faculty members of the Board are to be elected by the Faculty for terms of three years. The Faculty having asked the President to make the initial appointments, he named Professor J. P. Bretz to serve to January 1, 1941, Professor W. E. Stanley to serve to January 1, 1942, and Professor James M. Sherman to serve to January 1, 1943. The Board includes the Chairman of the Department of Hygiene and Preventive Medicine, the University Physician-in-Chief, the President, the Treasurer, the Dean of the Medical College, three faculty members, three trustees appointed annually by the Board of Trustees, and three student members chosen in such manner as the President may direct.

At the meeting of the Faculty held in May it was reported that the newly constituted Board on Student Health and Hygiene had recommended the appointment of three physicians to the staff of the Infirmary to provide full-time resident service, and that the Board of Trustees had followed the recommendation and had in addition appointed a full-time clinician.

CHANGES IN THE STATUTE DEFINING FACULTY MEMBERSHIP

The statutes of the University have from time immemorial limited membership in the University Faculty and in the special faculties to a few named administrative officers and to those "who teach regular students", and it has been assumed that all those who are chiefly concerned with research will qualify because they have graduate students under their charge. But through the years the functions of the University have become diversified through the greater development of research, which is no longer regarded as merely incidental to teaching, and through the great growth in the extension service, which is now limited largely to the fields of agriculture and home economics.

For the purpose of record it may be indicated that before 1916 it seems to have been the practice to consider the relatively few persons then in the extension service as faculty members by virtue of their professorial appointments, but in 1917 the Board of Trustees decided to enforce the literal provisions of the statute, and extension professors and assistant professors were thereafter excluded from both the University Faculty and the special faculties, although exception was made for the very few men who had reached the rank of extension professor by April, 1917.

Record may also be made of the curious situation of the Geneva Station staff in relation to faculty membership. Before any organic connection existed between the Station and the University, the institutions agreed (1920) to the reciprocal election of a few members of their respective staffs. When, in 1923, the Legislature placed the Experiment Station under the jurisdiction of the University Board of Trustees, the latter body provided that members of the Station staff might be members of the Graduate Faculty, or might be elected to the Faculty of Agriculture on recommendation of that Faculty. This provision seems not to have come to the notice of either staff and no such election ever occurred. Nevertheless it seems to have been assumed that membership in

the University Faculty had been automatically conferred upon the Station Staff, as will appear in the tabulation given at the beginning of this report and in previous annual reports. Fortunately this ambiguity of relationship now disappears.

The result of the statutory limitation of faculty membership to those who teach has been that large numbers of persons of the rank of professor and assistant professor have not been responsible to any official organization in the University, and have been automatically excluded from various phases of the life of the campus. The Faculty of Agriculture and the Faculty of Home Economics have regarded this situation as undesirable, and in May, 1939 the former body formally asked the University Faculty to give the problem consideration.

On recommendation of the University Faculty, the Board of Trustees has now changed the statute so as to include in the faculty membership, besides named administrative officers, all those who are of the rank of professor, associate professor, and assistant professor, whether their work be in teaching, extension, or research. However, part time members of the staff of the Medical College, all those who are in the extension service, and chiefs and associates in research at the Geneva Experiment Station are given only non-voting membership in the University Faculty. The second and third of these groups have full membership in either the Faculty of Agriculture or the Faculty of Home Economics in accordance with the field of work in which they are engaged. In addition provision was made for the election of other persons into membership by the various faculties, subject to approval by the Board of Trustees. This provision will facilitate the association of members of any one faculty with the work of another faculty when that seems desirable.

The changes reported above will immediately add about one hundred and sixteen non-voting members to the University Faculty. Of these ninety-eight will have full membership in the Faculty of Agriculture and eighteen in the Faculty of Home Economics.

THE WORK OF THE STANDING COMMITTEES OF THE FACULTY

Much of the business of the University Faculty is conducted by the standing committees. In 1932 the Faculty created the Committee on University Policy which came into operation on January 1, 1933, and since that time questions of policy and many matters of routine detail have been referred to that committee. Upon the whole it seems to have been advantageous to have this committee formulate the issues that arise and to make recommendations. At the same time the existence of the committee has not precluded the possibility of having special committees appointed to study particular problems, and the Committee on University Policy has itself set up subcommittees composed to a greater or less extent of persons outside its own membership. The committee has so far made thirty-five formal reports to the Faculty.

The Committee on University Lectures has this past year made provision for twenty-eight single public lectures. In addition, the Committee, at the suggestion of the Committee on Music, provided six lectures by Dr. Paul Hindemith, now Professor of Music at the University of Buffalo, recently appointed also as visiting lecturer at Yale University. These six lectures were on the topic, "An introduction to the technique of composition" and they engaged wide interest. The Messenger lectures, a series of twelve, were delivered by Thomas Downing Kendrick, Keeper of the British and Mediaeval Antiquities in the British Museum, under the general title, "The Art of the Anglo-Saxons."

The Committee on Music has provided the usual two series of concerts: the Bailey Hall series which was restored to the status of five concerts and to which was added an extra concert by Egon Petri, the Dutch pianist; the chamber music series in Willard Straight Hall consisted as usual of three concerts. The Committee announces that the Bailey Hall series for next year includes the Indianapolis Symphony Orchestra, Jascha Heifetz, Ethel Bartlett and Rae Robertson, Alexander Kipnis, and the Cleveland Orchestra. The chamber music

series will consist of three concerts, a Beethoven cycle, by the Pro Arte quartet. A gift from the Elizabeth Sprague Coolidge Foundation in the Library of Congress will make possible for students of the University a substantial reduction in admission fees for these last-named concerts. The Committee has arranged the appointment of Dr. Egon Petri as visiting lecturer in music for the next season.

The work of the Committee on Student Activities has been considerably modified by the creation of the Board on Physical Education and Athletics inasmuch as all questions of athletic eligibility and of athletic schedules, formerly dealt with by the Committee, are now handled by the new Board. These responsibilities having been shifted, the Committee on Student Activities will be more free to devote itself to the multifarious problems arising in the whole field of student welfare.

The Committee on Student Conduct has during the year dealt with seventy-eight students referred to it for possible disciplinary action. In twenty-eight of these cases the Committee judged no action necessary, three students were removed from the University, and the others were given warning, or reprimand, or were placed upon parole. As always, the Chairman dealt with many other students whose difficulties were not of such a nature as to require formal report to the Committee.

CORNELIUS BETTEN,
Dean of the University Faculty.

APPENDIX II

REPORT OF THE ACTING DEAN OF THE GRADUATE SCHOOL

To the President of the University:

SIR: I have the honor to present the report of the Graduate School for the year 1939-40.

Almost at the beginning of the autumn term, on 7 November, 1939, the death of Dean Richtmyer deeply shocked the entire community. His passing is a loss, not easily reparable, to the Graduate School, to the University, to the numerous educational societies of which he was encourager and officer, and to the body of workers in research and scholarship the country over. The countless tributes, personal and official, to him and his work are ample evidence of the high esteem in which he was held as a man and citizen and as an inspiring teacher and investigator. His nine years as Dean mark an epoch in the Graduate School, a period of efficiency and growth in keeping with the best traditions of the office, of the University, and of graduate study in American institutions. In acquisitions, in capacity for hard work, in enthusiasm, temper, and genial comradeship, Floyd K. Richtmyer was the model of a dean.

In most essentials I have followed the general policies familiar from the long administration of Dean Richtmyer, trying to carry on the routine work of the office as promptly and as smoothly as possible. I have not taken it as a part of my duty as an interim dean to "do something" merely for the sake of the doing, and there has arisen no issue, much less a crisis, to call for any unusual measures of procedure. If mere busyness is essential to the conduct of the office, then I have failed.

Certain items of Faculty legislation are to be noted as significant.

1. The provisions governing work under personal direction during the summer have been made somewhat more stringent, by the definite requirement that such work shall clearly be research, of which both the amount and the quality special committees will vouch for. The responsibilities of the special commit-

tees are the same for research under personal direction as for seminaries or other forms of graduate instruction. This tightening of the requirements will, it is believed, lessen the tendencies to abuse that have sometimes been charged against the method of personal direction. Of the general value of the method and its privileges there can be no question: it affords to many students opportunities denied to them during the winter by their obligations and duties or by the nature of the work itself; and it enables students who feel the pressure of time to shorten the calendar period in which to earn their advanced degrees. There is perhaps no better illustration of the interest and loyalty of the staff of instruction than their willingness, without added compensation, thus to devote their time and skill to the promotion of research.

2. On recommendation of the Division of Engineering the Faculty voted to discontinue the foreign language requirement for all masters' degrees in Engineering, with the proviso, however, that any special committee may in its discretion require one or more foreign languages as essential to the conduct and progress of the student's work. This action brings the engineering degrees into a group already authorized, so that now there is no foreign language requirement for admission either to non-candidacy or to candidacy for or for graduation with any of the degrees of M.S. in Agr., M. Ed., M.S. in Ed., M. Chem. E., M.C.E., M.E.E., M.M.E., M.S. in Eng.

The readiness with which the Faculty adopted the proposal, with scarcely any debate and without dissenting vote, is probably an indication of the trend, observable elsewhere, to do away with the language requirement *in toto*, even for the doctorate. Regrettable as it seems to many, the charge made long ago that American students are "underlanguages" is becoming truer every year. One brought up under the older discipline may venture to hope that Cornell will not in the end yield on the plea that foreign languages are not required in some other institutions which challenge her in graduate work.

3. The Faculty gave its approval to a proposal from the Division of Architecture and Fine Arts of a two-year graduate course having a fixed curriculum with a major in the history and practice of the fine arts and leading to the degree of M.F.A. In this arrangement the Graduate School is cooperating with the Colleges of Architecture and Arts and Sciences in a special course leading to the two degrees of A.B. and M.F.A. in six years. The Division has under consideration similar opportunities for students in the history and practice of music, drama, and poetry; such plans may be effective during the next academic year.

In his last report Dean Richtmyer made mention of the new so-called Plan B for certain masters' degrees: A.M., M.S., M.S. in Agr. This Plan differs from Plan A in requiring thirty semester hours to be earned in two regular terms or in five summer sessions. It is intended particularly for teachers in service who wish further training in the subject of their work, called the field of concentration (approximately half of the thirty hours) and such study in related subjects, the field of distribution, as may give them a broader background and help to greater confidence in their teaching. An acceptable research paper or critical essay is required in lieu of a formal thesis, and a final comprehensive examination must be satisfactorily passed as in Plan A. Plan B seems to be working well. Final judgment must be suspended until more data are at hand. A subcommittee is making an examination of selection of courses, records, etc., for a report early next year. During 1939-40 forty-two students were registered under Plan B; masters' degrees awarded under Plan B numbered three in September, 1939; two in February, 1940; fourteen in June, 1940.

The Trustees by action at the June meeting allowed free tuition to the holders of five more of our established fellowships. At present, therefore, all fellowships and scholarships having stipends of \$500 or less carry free tuition. (Some, but not all, having larger stipends carry free tuition under previous legislation.) Here lies one of the great needs of the Graduate School. In number and especially in emolument such as to attract the most promising candidates these honoraria aids to advanced study and research fall far short of adequacy. A

PRESIDENT'S REPORT

few figures, previously given to the Faculty, may serve to show the difference between what might be done with more ample funds and what we must be content with: for 1937-38 the applicants numbered 397; for 1938-39, 457; for 1939-40, 706; for 1940-41, 754. In view of these 754 applicants our 76 fellowships and scholarships (including 16 McMullen Scholarships to which appointment is made by the Faculty of Engineering) open for award seem pitifully few. Available funds for fellowships, \$20,160; for scholarships, \$18,000; free tuition to holders, \$11,000. For comparison I adduce some figures from the report of Acting Dean Mayo of the Harvard Graduate School for 1939-40: applicants, 1,358; awards made, 191; funds distributed on fellowships and other aids, \$116,896. Cornell may not be able to compete on equal terms with the oldest of American Universities; and it must be admitted that some other institutions seem little better off than Cornell. Still, if we are to maintain our position among institutions with which we prefer to be compared, we ought to be better provided with means for rewarding academic merit and for forwarding advanced study for which our staff, our libraries, and our laboratories are available.

I cannot close this report without a word of appreciation and gratitude for the General Committee and the office staff. Both are deserving of praise for their generous and genuine helpfulness.

The usual statistical summaries are appended.

B. S. MONROE,
Acting Dean of the Graduate School.

TABLE I
STATISTICS OF ATTENDANCE OF GRADUATE STUDENTS
A. TOTAL ENROLLMENT

	1939-40	1938-39	1937-38	1936-37	1935-36
Number of students registered during the academic year	1000	1049	955	936	816
Number of students registered during the summer, as below ..	824	815	829	802	736
Summer Session	624	649	641	634	571
Personal Direction	164	132	188	168	165
Candidate for Degree Only ...	36	32	—	—	—

B. COMPARATIVE ENROLLMENT OF
GRADUATE STUDENTS FOR FIVE-YEAR PERIODS

1909-10	1914-15	1919-20	1924-25	1929-30	1934-35	1939-40
309	390	408	583	863	733	1000

C. NEW GRADUATE STUDENTS

	During Academic Year 1939-40	Summer Session 1939
Ph.D. degrees	111	21
A.M. and M.S. degrees	177	82
Professional Masters' degrees	34	63
Resident Doctors	4	6
Non-candidates	42	19
Withdrawals after registration	1	2
Total	369	193

GRADUATE SCHOOL

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TABLE II

GRADUATE STUDENTS RECEIVING DEGREES, CLASSIFIED ACCORDING TO THE
DEGREE RECEIVED

	1939-40	1938-39	1937-38	1936-37	1935-36
Masters' Degrees					
Masters of Arts	79	81	65	74	72
Masters of Arts in Education ...	4	4	7	18	10
Masters of Science	84	69	75	82	70
Masters of Science in Education.	38	28	33	24	13
Masters of Science in Agriculture	17	17	15	10	13
Masters of Science in Engineer- ing	18	22	11	10	7
Masters of Forestry	0	0	4	3	1
Masters of Laws	1	0	1	0	1
Masters of Chemistry	0	0	2	3	3
Masters of Architecture	2	1	1	0	3
Masters of Fine Arts	1	0	1	1	1
Masters of Landscape Architec- ture	0	1	1	0	0
Masters of Chemical Engineer- ing	0	2	0	0	0
Masters of Civil Engineering ..	6	11	16	16	16
Masters of Electrical Engineer- ing	0	1	1	2	0
Masters of Mechanical Engineer- ing	3	3	4	2	3
Total Masters' Degrees	253	240	237	245	213
Doctors of Philosophy	131	130	131	124	124
Doctors of the Science of Law ...	0	0	0	1	0
Total	384	370	368	370	337

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TABLE III

GRADUATE STUDENTS CLASSIFIED ACCORDING TO THE DEGREES
FOR WHICH THEY ARE CANDIDATES

	<i>Academic Year</i> 1939-40	<i>Summer</i> 1939
Doctors of Philosophy	566	202
Doctors of the Science of Law	0	0
Masters' Degrees, as below.....		
Masters of Arts	112	144
Masters of Arts in Education	3	10
Masters of Science	165	131
Masters of Science in Agriculture	26	13
Masters of Science in Education	18	219
Masters of Science in Engineering	30	19
Masters of Forestry	0	0
Masters of Laws	1	0
Masters of Chemistry	0	0
Masters of Architecture	2	0
Masters of Fine Arts	1	0
Masters of Landscape Architecture	0	0
Masters of Chemical Engineering	2	0
Masters of Civil Engineering	9	5
Masters of Electrical Engineering	0	0
Masters of Mechanical Engineering	4	6
Non-candidates:		
Resident Doctors	11	13
Non-candidates	49	31
Others (withdrawals, duplicates, etc.)	1	31
Total	1000	824

TABLE IV

GRADUATE STUDENTS CLASSIFIED ACCORDING TO THE GROUP
IN WHICH THE MAJOR SUBJECT FALLS

	1939-40	1938-39	1937-38	1936-37	1935-36
Group A, Languages and Literatures.	112	125	114	108	109
Group B, History, Philosophy, and Political Science	163	180	165	172	153
Group C, Physical Sciences	146	156	151	139	135
Group D, Biological Sciences	253	237	236	224	196
Group E, Engineering, Architecture..	91	90	88	80	64
Group F, Science Departments, New York City	17	7	7	8	10
Group G, Agricultural Sciences	121	158	116	113	96
Group H, Law	1	0	1	2	4
Group I, Education	84	96	77	71	49
Others (Resident Doctors)	12				

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TABLE V
INSTITUTIONS FROM WHICH GRADUATE STUDENTS RECEIVED
THEIR FIRST DEGREES

Acadia University	1	Colombia, National Agricultural	
Agnes Scott College	1	Institute of	1
Alabama, University of	1	Colorado College	2
Alberta, University of	3	Colorado State College	4
Albright College	1	Colorado, University of	2
Alfred University	3	Columbia University	7
Aligarh University	1	Connecticut State College	5
Allahabad, Agricultural Insitute		Connecticut, University of	2
of	2	Copenhagen, University of	1
Allegheny College	1	Cornell College	1
Alma College	1	Cornell University	205
American University of Beirut ..	1	Costa Rica, Liceo de	1
Amherst College	1	Dalhousie University	1
Arizona, University of	2	Dartmouth College	11
Arkansas, University of	5	Davidson College	3
Armour Institute of Technology ..	1	Delaware, University of	3
Augustana College	1	Denison University	1
Ball State Teachers College	1	De Pauw University	4
Barnard College	2	Dickinson College	1
Bates College	1	Drew University	1
Battle Creek College	1	Drury College	1
Beaver College	1	Duke University	2
Bennington College	1	Eastern Illinois State Teachers	
Berea College	1	College	1
Berlin, University of	1	Elmira College	5
Besancon College	1	Flora MacDonald College	1
Bombay University	1	Florida, University of	2
Boston University	1	Framingham State Teachers Col-	
Bowdoin College	1	lege	1
British Columbia, University of ..	4	Franklin and Marshall	1
Brooklyn College	1	Fuh Tan University	1
Brooklyn Polytechnic Institute ..	2	Fukien Christian University	2
Brown University	3	Furman University	1
Bryn Mawr	1	George Washington University ..	4
Bucknell University	1	Georgetown College	1
Buenos Aires, University of	1	Georgia Tech.	1
Buffalo, University of	3	Georgia, University of	1
California, University of	18	Gettysburg College	2
California, University of, at Los		Goucher College	1
Angeles	7	The Great China University	1
California Institute of Technology	1	Hamilton College	7
Canisius College	1	Hampden-Sydney College	1
Carleton College	1	Hampton Institute	1
Carnegie Institute of Technology ..	2	Hangchow Christian College	2
Catawba College	1	Harvard University	4
Catholic University at Peking ...	1	Havana, University of	2
Chiao Tung University	6	Haverford College	1
Chicago, University of	5	Hawaii, University of	2
Chile, University of	2	Hiram College	2
Chulalongkrama University	1	Hobart College	7
Cincinnati, University of	2	Hokkaido Imperial University ..	1
Clark University	3	Holy Cross College	1
Clemson Agricultural College	6	Hood College	1
Coe College	1	Houghton College	4
Colby College	1	Howard University	1
Colgate University	4	Hunan University	1

Hunter College	10	Nankai University	1
Idaho, University of	2	Nanking, University of	2
Illinois, University of	19	Nanking Theological Seminary ..	2
Indiana Central	2	National College of Education ...	1
Indiana State Teachers College at Indiana, Pennsylvania	1	Nazareth College	2
Indiana University	4	Nebraska, University of	9
Iowa State College	9	Nebraska Wesleyan University ..	1
Iowa State Teachers College	1	Netherlands Economic University	1
Iowa, University of	3	Nevada, University of	2
Iowa Wesleyan College	1	New Brunswick, University of ..	2
Ireland, National University of ..	1	New College	1
Ithaca College	1	New Hampshire, University of ..	5
Kalamazoo College	3	New Jersey College for Women .	1
Kansas State Agricultural College	6	New York, College of the City of	8
Kansas State Teachers College at Emporia	1	New York State College for Teachers at Albany	8
Kansas, University of	2	New York State College for Teachers at Buffalo	2
Kentucky, University of	4	New York University	4
Keuka College	1	Newark College of Engineering..	2
Lafayette College	2	North Carolina College for Ne- groes	1
Laval University	3	North Carolina State	3
Lehigh University	2	North Carolina, University of ...	1
Lingnan University	1	North Dakota, State College of .	5
Louisiana State University	5	North Texas State Teachers Col- lege	1
Lynchburg College	1	Northwestern University	2
McGill University	3	Notre Dame, University of	1
McMaster University	4	Oberlin College	15
Madrid University	1	Occidental College	1
Maine, University of	5	Ohio State University	15
Manitoba, University of	2	Ohio, University of	3
Mansfield Teachers College	3	Ohio Wesleyan University	1
Marietta College	2	Oklahoma Agricultural and Me- chanical College	4
Marseille, University of	1	Oklahoma, University of	1
Maryland, University of	5	Omaha, University of	1
Maryville College	1	Ontario Agricultural College	4
Marywood College	1	Ontario Veterinary College	2
Massachusetts Institute of Tech- nology	4	Oregon State College	2
Massachusetts State College	9	Oregon, University of	3
Meredith College	1	Oxford University	1
Miami University	2	Park College	1
Michigan Central State Teachers College	1	Peiping University	1
Michigan State College	7	Pennsylvania State College	11
Michigan, Northern State Teach- ers College of	1	Pennsylvania, University of	3
Michigan, University of	5	Philadelphia College of Pharmacy and Science	1
Middlebury College	3	Philippines, University of the ...	5
Mills College	2	Pittsburgh, University of	2
Minnesota, University of	11	Pomona College	4
Mississippi State	3	Presbyterian College	1
Missouri, University of	10	Pretoria University	1
Montana State College	2	Princeton University	2
Montreal, University of	6	Puerto Rico, University of	2
Morehouse College	1	Purdue University	11
Mount Holyoke College	4	Queens University	1
Muhlenberg College	1	Randolph Macon College	1
Munich Polytechnic Institute ...	2		

Reed College	1	Texas, University of	1
Rensselaer Polytechnic Institute ..	4	Toronto University	6
Rhode Island State College	1	Trinity University	2
Rice Institute	1	Tri-State College	1
Richmond, University of	3	Tsing-hua University	3
Roanoke	1	Tulane University	1
Rochester	2	Union College	5
Rockford	2	United States Military Academy ..	13
Rollins College	1	Utah State Agricultural College ..	12
Royal Techn	1	Utah, University of	4
Ruhen	1	Vassar College	3
Russell Sage College	1	Vermont, University of	3
Rutgers University	3	Vienna, Technical University of ..	1
St. Bonaventure College	2	Virginia Polytechnic Institute ...	3
St. Cloud State Teachers	1	Virginia State College	1
St. John's University	2	Virginia State Teachers College ..	
St. Lawrence University	3	at Fredericksburg	1
St. Olaf College	1	Virginia, University of	2
St. Thomas College	1	Wabash College	3
San Jose State College	1	Warsaw University	1
Simmons College	4	Washington and Lee	1
Simpson College	1	Washington State College	5
Skidmore College	2	Washington University	1
Slippery Rock State Teachers ..		Washington, University of	6
College	1	Wellesley College	5
Smith College	1	Wells College	1
Soochow University	1	West Virginia State College	1
South Africa, University of	1	Western College, Oxford, Ohio ..	1
South Carolina, University of ..	2	Western Ontario, University of ..	2
South Dakota School of Mines ..	1	Western Reserve	2
South Dakota State College	1	Westminster College	2
Southeast Mississippi State Teach-		Wheaton College	1
ers College	1	Whitworth College	1
Southern California, University of	3	Wiley College	2
Southern University	1	William Smith College	1
Spearfish Normal	1	Williams College	4
Springfield College	1	Wilson College	2
Stanford University	2	Wisconsin, University of	9
Susquehanna University	2	Wooster College	1
Swarthmore College	1	Worcester Polytechnic Institute..	1
Syracuse University	7	Wyoming, University of	1
Temple University	1	Yale University	1
Tennessee, University of	1	Yenching University	4
Texas Agricultural and Mechanic-		Zurich, University of	1
al College	2		

TABLE VI

GEOGRAPHICAL DISTRIBUTION OF GRADUATE STUDENTS

Alabama	3	Illinois	27
Arizona	2	Indiana	16
Arkansas	6	Iowa	9
California	31	Kansas	8
Colorado	7	Kentucky	6
Connecticut	13	Louisiana	7
Delaware	5	Maine	7
District of Columbia	7	Maryland	9
Florida	5	Massachusetts	26
Georgia	4	Michigan	15
Idaho	4	Minnesota	12

PRESIDENT'S REPORT

Mississippi	4	Puerto Rico	3
Missouri	14	Total Number of Students from	
Montana	2	The United States	886
Nebraska	12	Argentina	2
Nevada	2	Austria	1
New Hampshire	7	.....	2
New Jersey	26	.....	35
New Mexico	2	.....	1
New York	392	.....	40
North Carolina	9	.....	2
North Dakota	3	.....	1
Ohio	33	.....	1
Oklahoma	4	.....	2
Oregon	5	.....	1
Pennsylvania	47	.....	1
Rhode Island	3	.....	1
South Carolina	9	.....	1
South Dakota	6	.....	1
Tennessee	4	.....	1
Texas	9	.....	5
Utah	14	.....	1
Vermont	4	.....	1
Virginia	17	.....	1
Washington	9	.....	1
West Virginia	4	.....	2
Wisconsin	6	.....	1
Wyoming	3	.....	2
United States Possessions		.....	1
Alaska	1	.....	7
Hawaii	1	.....	2
Philippine Islands	2	Total Number of Students from	
		Foreign Countries	114

APPENDIX III

REPORT OF THE DEAN OF THE COLLEGE OF ARTS
AND SCIENCES

To the President of the University:

SIR: I have the honor to present this report of the College of Arts and Sciences for the academic year 1939-40.

ENROLLMENT

The total enrollment for the year was 1827 students, 1202 men and 625 women. Among these students seventy men were candidates for the degree Bachelor of Chemistry, a degree which will be discontinued when these students have finished their course of study. The candidates for the degree A. B., 1757, compare with 1780 such candidates in 1938-39. Of the 570 new students admitted to the College during the past year, 426 were freshmen, 139 transferred from other colleges, including 60 from sister colleges in Cornell, and 5 were special students. In the previous year, 1938-39, among the 534 new students 429 were freshmen, 96 were transfers, 31 from sister colleges in Cornell, and 9 were special students.

The number of "student hours" recorded by the Registrar in courses offered by the College in both terms of the past year is 84,209, which is forty-five per cent of the total student-hours of the University. This number is slightly less than in 1938-39 when it was 84,823. The decrease in our own student-hours is

offset by an increase of registration in our courses of students from other colleges, notably Engineering.

CURRICULAR REVISION

The faculty is now engaged in the study of proposals to change certain of the curricular requirements of the College. These proposals may be considered in four parts:

(1) A greater flexibility in our entrance requirements is suggested. Instead of the rigidity of specified "units" in English, foreign language, history, and mathematics, it is proposed that the Committee on Admissions be given discretion in the selection of students who have successfully completed a secondary course of study which emphasizes those subjects in which the College specializes: namely, English, foreign language, history, mathematics, and science.

(2) Proficiency tests are to be administered at entrance and at the end of each term in English, in a foreign language, and in mathematics. A student who fails the test will be assigned to a course of study calculated to review and correct deficiencies in reading, writing, and speaking English; in reading Latin, Greek, French, German, Spanish, or Italian, and in simpler and more practical operations of mathematical calculation, including statistics and graphic representations. Credit towards graduation for courses taken in correcting these deficiencies will presumably be limited to three hours in each subject.

(3) The subjects of study in the College are to be grouped under three general headings:

- I. The Humanities, to include Language, Literature, Music and the Fine Arts.
- II. The Social Studies, to include Philosophy, History, Government, Economics, Education, Sociology and Anthropology.
- III. Mathematics and the sciences of Astronomy, Botany, Chemistry, Geology, Physics, Psychology, and Zoology.

Each student must elect a minimum of twelve hours in each group and these hours may not include courses taken for the purpose of proficiency described under (2).

(4) The concept of major work is to be broadened so as to permit a program in two or more departments. Such a program is already permitted in Fine Arts, where music, literature, and the visual arts are combined. The need for a program in Biology, Chemistry, and Physics is felt by students preparing for the study of medicine, and other combinations of subjects have been suggested to meet the general and special interests of students. These new programs will be subject to approval by the Group to which they belong and by the Committee on Academic Records which has supervision over all programs of major study.

These four proposals have been a subject of discussion by the chairmen of the departments of the College meeting groupwise with the officers of the College and representatives of the Committee on Educational Policy. Tentative approval was given by these representatives to the proposals described under (1) and (4). The representatives of Groups I and III expressed approval of proposals (2) and (3), and recommended a free election of the twelve hours to be required in each Group. The representatives of Group II were divided in their opinions. They agreed upon the desirability of a proficiency requirement in English, but were doubtful of the requirements proposed in foreign language and mathematics. They appeared to agree upon the proposal that twelve hours of work should be taken in each group, but were undecided as to the courses which might appropriately meet this requirement.

It was agreed by all that if proficiency tests are adopted, they should be administered by an Examining Board chosen for the purpose whose business it would be to set the examinations in cooperation with the departments primarily concerned. When college opens in the autumn, further consideration will be given these proposals; an effort will then be made to reconcile differences of opinion.

As regards prescribed courses in the three groups into which the subjects of the College have been divided, interest was shown in making any such prescriptions comprehensive of the fields of study which the groups embrace. Ideas entertained regarding this provision for "general education" led the Committee on Educational Policy to appoint a subcommittee consisting of Professors Cunningham, Tenney, and Marcham, chairman, who will undertake during the summer to survey this subject and make recommendations in the autumn.

The Committee has also authorized a former member, the Professor of Botany, Professor Petry, to undertake, in collaboration with representatives of the departments concerned, a study of teaching methods and programs employed in the introductory courses in the laboratory sciences.

NEW COURSES

In addition to the survey course in social science which will be offered next year for the first time, a new course on Human Growth and Development has been approved by the Faculty. The course was planned by a committee appointed by the School of Education which has adopted it as a part of the five-year program of teacher training. The first term of the course will be conducted by the Professor of Anatomy, Dr. Papez, and the second term by the Professor of Education, Dr. Freeman. The course will "integrate information about structural, physiological, behavioral, and intellectual aspects of growth and development," the material being selected from anatomy, embryology, genetics, neurology, physiology, hygiene, sociology, cultural anthropology, and developmental psychology. Although the theme projects itself into many departments of specialized study, the integration of these varied subjects promises a rich and useful approach to the problems of the teacher and also to those of the intelligent layman.

The success of an interdepartmental seminar on Utilitarianism which has been conducted for the past two years by members of the Departments of Economics, Government, History, Philosophy, and Sociology and Anthropology has led to the offering of two new seminars next year. One on Human Behavior is to be offered by members of the Department of Psychology and of Sociology and Anthropology; the other, on Nationalism, will be offered by members of the Departments of Government, History, Philosophy, Psychology, and Sociology. In each case registration is by permission and limited to senior students having major work in one of the departments concerned.

TEACHER TRAINING

The cooperation of the College with the School of Education in furthering a five-year program of teacher training has brought before the Faculty the question whether all our students who wish to prepare for teaching in secondary schools should be advised to follow the program outlined by the School of Education. The question was referred by the Faculty to the Committee on Educational Policy which in turn sought the advice of our Committee on Teacher-Training in the College. The Committee on Educational Policy received from the Committee on Teacher Training the following statement which was subsequently approved by the Faculty: "The newly established provision of the School of Education whereby holders of a Bachelor's degree may in one summer and an additional year of residence satisfy all requirements, both for certification and for the degree Master of Education, offers a satisfactory alternative to the Five-Year Program in which the requirements are distributed throughout the five years." Although a program of study leading from the degree A. B. to A. M. might also meet the technical requirements for certification, it was observed that such a program would not include apprentice teaching, and candidates for teaching posts might suffer a handicap by reason of that deficiency.

ACADEMIC REGULATIONS

During the past year the Faculty has approved the following rules and regulations:

(1) "A student on probation who registers in the Cornell Summer Session may not be removed from probation at the end of the Summer Session unless he shall have completed at least eighteen hours of a grade 70 or better in the two preceding terms and the Summer Session." Although this is not a new practice it is now for the first time authorized by the Faculty and published in the College Announcement.

(2) "In courses of which parts are graded separately (e. g., a lecture part and a laboratory part), no student may make up a part in which he is deficient without repeating the course as a whole, unless he has received for his term grade a mark of 'incomplete' or 'absent'." Hitherto we have had some administrative difficulty with students who received failing grades in courses, although upon repetition of the course for credit they were not required to repeat the course as a whole, but only certain parts, lectures, recitations, or laboratory exercises. It is the opinion of the Faculty that if a student already has an equity in a course so substantial that he need repeat but a part of it in order to secure credit for the whole, he is entitled to a grade which will permit him to make up his deficiency without re-registration. It is not the intention of the Faculty that this regulation shall open the way to a revival of the practice of "conditioning" courses, but only to avoid the necessity of re-registration in a course where a large part of the work has been satisfactorily completed and need not be reviewed.

(3) In addition to the regulation that before graduation a grade of 70 or better must be earned in at least sixty of the required one hundred and twenty hours, the Faculty has ruled that "at least one-half of the major requirement, including related subjects, must be passed with grades of 70 or better." This provision should discourage students from pursuing a field of specialization in which they have little aptitude.

(4) After considerable debate, during which an alternative proposal to require of all students six hours in mathematics or six hours in philosophy was considered, the Faculty has voted to abandon the group of studies known as "Group 5" which included most of the subjects of the College not specified in the four remaining groups of prescribed studies.

(5) A change has been made in the entrance requirement of foreign language. Hitherto the requirement has been three units of one foreign language, and if two units were not offered in a second foreign language, there must be two units in additional history, or two units in advanced mathematics and science, or two units in sciences, including chemistry or physics. The new requirement is three units in one foreign language or two units in each of two foreign languages. The alternatives in history, mathematics, and science no longer figure as specifications.

COLLEGE INTERESTS

Since the inauguration of selective admission to the College, the selection has been handled by the Director of Admissions to the University in cooperation with the Dean and the Assistant Dean. In order to improve and expedite the work of selecting candidates for admission, a part-time officer of the College has recently been appointed to serve in liaison with the Office of Admissions. In filling the Chairmanship of the Advisory Board for Underclassmen, which fell vacant with the end of Professor Southard's term of office, Assistant Professor B. L. Rideout has accepted this post with the additional responsibility of supervising the selection and induction of new students in the College. The Office of the Dean is now able to carry on its own correspondence with prospective students, and to work actively with the schools which supply us with our students, and with the alumni groups and persons who interest themselves in the recruitment of students for Cornell.

As an aid to this work an attractive booklet has been prepared which sets forth the offerings of the College by word and picture. Professor Morris Bishop, as chairman of a sub-committee of the Committee on Educational Policy, con-

tributed the text of the booklet and Mr. R. F. Howes, Assistant to the Dean of the College of Engineering, gave generous assistance in procuring pictures and planning a layout which has been beautifully printed by the Humphrey Press of Geneva.

CHAIRMEN OF DEPARTMENTS

The following appointments and reappointments have been made by the Board of Trustees. The date following the name indicates the year in which the appointment terminates:

Department of Chemistry,	Professor Peter Debye, Chairman (1943)
	Professor Jacob Papish, Vice-Chairman (1943)
Department of Economics,	Professor Donald English, Chairman (1941)
Department of Education,	Professor J. E. Butterworth, Chairman (1941)
Department of Mathematics,	Professor R. P. Agnew, Chairman (1945)
Department of Psychology,	Professor H. P. Weld, Chairman (1945)
Department of Public Speaking,	Professor H. A. Wichelns, Chairman (1945)

STANDING COMMITTEES OF THE COLLEGE

The membership of the standing committees of the College is listed below. It is a pleasure to record the faithful service of all who shared the responsibilities of these various groups. The names of those serving terminal appointments are followed by the date of retirement.

Committee on Educational Policy: A. W. Laubengayer (for F. S. Freeman), 1940; F. A. Southard, jr., 1940; H. B. Adelman, 1941; E. A. Tenney, 1941; M. G. Bishop, 1942; G. W. Cunningham, 1942; R. P. Sibley, R. M. Ogden, *ex officio*.

Recently elected to succeed Professors Freeman and Southard are Professors A. W. Laubengayer and F. G. Marcham.

Committee on Academic Records: A. W. Boesche, 1940; V. S. Lawrence, jr., 1940; P. E. Mosely, 1940; J. R. Collins, 1941; W. M. Sale, jr., 1941; R. H. Wagner, 1941; H. W. Briggs, 1942; J. L. Hoard, 1942; C. W. Merriam, 1942; F. A. Southard, jr., R. P. Sibley, R. M. Ogden, *ex officio*.

Advisory Board for Underclassmen: R. F. Bacher; L. L. Barnes; W. F. Bruce; J. D. Burfoot, jr.; Harry Caplan; Elias Huzar; W. A. Hurwitz; George Kreezer; A. W. Laubengayer; V. S. Lawrence, jr.; F. G. Marcham; P. E. Mosely; G. B. Muchmore; B. L. Rideout; Richard Robinson; T. A. Ryan; W. M. Sale, jr.; R. L. Sharpe; F. O. Waagé; H. S. L. Wiener; F. A. Southard, jr., (Chairman) R. P. Sibley, R. M. Ogden, *ex officio*.

Professor B. L. Rideout has been named Chairman of the Board in succession to Professor Southard. Dr. Ryan retires, and his place will be filled by Dr. R. K. White.

Committee on Boldt and Hall Scholarships: R. E. Montgomery (Chairman), 1940; E. A. Burt, 1941; H. Caplan, 1942.

Committee on Conduct of Examinations: H. W. Briggs, 1940; Dallas M. Coors, 1940; J. L. Woodward, 1940; Mary S. Hewlett, 1940; J. M. Richards, 1940; L. C. Boochever, jr., 1941; Ann Edgerton, 1941; H. A. Myers, 1941; R. J. Walker, 1941; George Kreezer, 1942; Edward C. Sampson, 1942; R. P. Sibley, R. M. Ogden, *ex officio*.

Committee on College Credit Examinations: M. G. Bishop, J. P. Bretz, W. B. Carver, H. E. Howe, R. H. Wagner, F. S. Freeman, Chairman.

Committee on Decoration of Goldwin Smith Hall: M. G. Bishop, F. G. Marcham, and the Dean.

Committee on Goldwin Smith Reading Room: Otto Kinkeldey, Edwin Nungezer, and the Dean.

Committee on Teacher Training in the College: H. R. Anderson, M. G. Bishop, Harry Caplan, O. D. von Engeln, B. W. Jones, W. M. Sale, jr., M. L. Hulse, Chairman.

Committee on Pre-Medical Study in the College: H. B. Adelman, L. L. Barnes, W. F. Bruce, V. S. Lawrence, jr., Chairman.

Committee on the Interdepartmental Course in Social Science: R. E. Cushman, P. T. Homan (for F. A. Southard, jr.), J. L. Woodward, Chairman.

R. M. OGDEN,

Dean of the College of Arts and Sciences.

APPENDIX IV

REPORT OF THE DEAN OF THE LAW SCHOOL

To the President of the University:

SIR: I have the honor to submit the following report of the Law School for the academic year 1939-40.

THE FACULTY

It is with deep sorrow that I record the loss to the Law School and to the University of Professor Charles K. Burdick who died on June 22, 1940. In the annual report for the year 1936-37, I had the satisfaction of reviewing the notable progress of the School under Professor Burdick's leadership, as acting dean in 1923-24 and in 1925-26, and as dean from the fall of 1926 to December 31, 1936. During his administrations, the requirements for admission to the School and the standards for retention in it were raised; graduate work in law was introduced; scholarship and loan assistance for needy students and placement service for graduates were provided; the salary scale was increased, the faculty enlarged, and the curriculum enriched; Myron Taylor Hall was completed in 1932 and the admirably successful adaptation of its facilities to the needs of the School was in large measure due to Dean Burdick's meticulous scrutiny and supervision of the building plans.

He inherited his temperament for teaching and scholarship from his father, Francis M. Burdick, who came to Cornell as a member of its first faculty of law in 1887, and who left here in 1891 to become Dwight Professor of Law at Columbia where he served for twenty-five years and where he taught his son who was a member of the class of 1908 in that law school. Together, the two Professors Burdick taught at Cornell for thirty of the fifty-three years of the life of this Law School.

Professor Charles Burdick taught most of the subjects in the curriculum, but in later years his chief interest and his specialization was in Constitutional Law and International Law. He was author of "The Law of the American Constitution", and a member of the Advisory and Executive Committees of Research in International Law. He published many articles on various subjects, was editor of a casebook on Public Service Carriers and Innkeepers, and editor of the revised editions of his father's text and casebook on the Law of Torts.

His students and his associates will remember him as liberal in viewpoint, searching and direct in his thinking, brilliantly lucid and forceful in exposition, dignified and affable in manner. His eminence as a teacher and scholar, and his success as a loyal, tactful, and aggressive administrator have contributed to the reputation and the progress of the University.

When it became apparent that Professor Burdick's illness would prevent him

from resuming his teaching during the second term of the year just closed, Professor Robert E. Cushman, Goldwin Smith Professor of Government, was offered and graciously accepted an appointment as Acting Professor of Law. It was fortunate that in this emergency the course on Constitutional Law could be taken over by so able a teacher and so distinguished a scholar in this field. Both the Law School and the University are greatly indebted to Professor Cushman for his assumption of this added teaching burden.

Two members of the Faculty were on sabbatic leave during the past year. From July 1, 1939, till January 31, 1940, Professor Whiteside was associated with the offices of Whitman, Ransom, Coulson and Goetz in New York City. In the second term, Professor Laube, after a short vacation, was in residence in Ithaca and devoted his time to the compilation of materials for his casebook on the Law of Wills and the Administration of Decedents' Estates.

The position of Teaching Fellow was held by Mr. Herbert R. Baer. Mr. Baer received his A. B. from Cornell in 1923 and his LL.B. from Harvard in 1926. From 1926 until the spring of 1939, he was associated with the offices of McCarter and English in Newark, N. J. He gave most valuable direction to the First Year Moot Court work, which was again conducted with the increased faculty support and the assistance of the Student Moot Court Board as explained in the last Report. He also collaborated with commendable effectiveness in the presentation of the Third Year problem courses in Trade Regulation, Taxation, and Election of Remedies.

CONTINUED STUDY OF THE PROBLEMS OF EDUCATION FOR THE BAR

As indicated in the last Report, the Faculty is alive to the importance of continuous thoughtful study of the problem of improving legal education. It has carried forward its deliberations on this problem throughout the year, including consideration of the content of pre-legal education and the injection of "non-legal" material into the law school curriculum. Progress was made toward the formulation of a program for future experimentation. The only changes to be put into effect next year are the advancement of Constitutional Law so that it becomes a part of the required first year program, and the presentation for the first time of a course in Labor Law to be made available for election by upper-class men.

The development of the curriculum at Cornell and elsewhere has resulted in the allocation of various appropriate phases of Constitutional Law to several advanced courses. The Faculty believes that it has become desirable to introduce into the first year a course in Constitutional Law designed to serve as an early foundation for these advanced subjects and for the study of the procedural courses of the second and third years.

The course on Labor Law marks an experimental departure from orthodox law school programs, for the course will be conducted by Professor Royal Montgomery, of the Department of Economics in the College of Arts and Sciences. Though Professor Montgomery is not a lawyer, he has for years been a student of the statutes and of the common law and equity decisions relating to trade unionism and labor disputes. He will direct study of the law applicable to the objects and methods of labor organizations, and of the legal, constitutional, and public policy implications of contemporary government policies toward labor. Advanced law students, with their prior background of training in the social sciences, will be afforded opportunity for the concrete application of theoretical knowledge of economics, sociology, and political science in this particular field, and for consideration of the soundness of the development and the present state of the law relating thereto. It should be an interesting and worthwhile experiment in a phase of law which has such critical sociological implications and the practice of which is becoming increasingly important.

In connection with planning for future developments, it seemed most desirable to obtain from experienced, successful, and thinking practitioners, their views as to the deficiencies of education for present-day practice, and to have our plans, perhaps tempered, and certainly strengthened by receiving the benefit

of their criticisms and suggestions. Consequently, at the fall meeting of the Cornell Law Association, I proposed that there should be constituted a Committee on Cooperation with the Law School. The suggestion was adopted and a committee comprising the following alumni was appointed:

Hon. Leonard C. Crouch, Ph.B. '91, Syracuse, Representing the Judiciary.

Arthur H. Dean, LL.B. '23, New York City, Representing corporate practice.

Mary H. Donlon, LL.B. '20, New York City, Representing women lawyers and general metropolitan practice.

Thomas B. Gilchrist, LL.B. '06, New York City, Representing practice of the law of trusts and estates.

Ralph S. Kent, LL.B. '05, White Plains, Representing trial and general practice.

Edwin J. Marshall, LL.B. '94, Toledo, Ohio, Representing general practice in the mid-west.

W. Clyde O'Brien, LL.B. '22, Rochester, Representing trial and general practice.

Percy W. Phillips, LL.B. '15, Washington, D. C., Representing the tax specialist.

Alexander Pirnie, LL.B. '26, Utica, Representing general practice.

Maxwell Tretter, LL.B. '29, New York City, Representing general practice and government service.

Elbert P. Tuttle, LL.B. '23, Atlanta, Ga., Representing general practice in the south.

It will be noted that the committee was selected to be representative of the bench and bar, of different geographical locations, and of government service as well as various types of private practice.

The first meeting of the committee was held at the Law School on June 15, and was attended by a majority of the committee and by most of the members of the Faculty. The call for the meeting suggested the following matters as deserving consideration:

(a) The pre-legal curriculum.

(b) A four-year law course based upon three years of undergraduate preparation.

(c) The introduction of so-called non-legal materials into the law school curriculum.

(d) A proper balance between required and elective courses, including consideration of what courses should be required.

(e) A proper balance between the traditionally fundamental courses and courses recently established to care for new or expanding fields.

(f) The adequacy of the case-book method of instruction and the problem of varying the method of instruction in the third year.

(g) The problem of training for practice in the metropolitan and rural areas.

(h) The problem of training for government service.

Limitations of time prevented consideration of all of these topics, and attention was devoted chiefly to the first three and to (d), (e) and (g). Though opinions were divided, there was much sentiment in favor of more direction of the prospective law student's pre-legal program, and of the suggestion of the possibility of collaboration with the College of Arts and Sciences in developing a more perfect total program of education for the practice of law. There was also a generally favorable attitude toward the proposal of a properly planned four-year law school course based upon three years pre-law school training. In connection with topics (d), (e) and (g), it was suggested that a factual study of the things which typically active lawyers in typically average communities deal with might furnish sufficient data for determining whether the Law School is or is not training lawyers capable of handling the problems which come daily into law offices, and for determining the relative importance of various courses and of topics within courses.

This joint deliberation was most helpful. It developed ideas which challenge the Faculty's consideration during the coming months, and it crystallized the belief in the profitableness of additional meetings between the committee and the Faculty.

NEEDS OF THE LAW SCHOOL

Additional funds allocable to the support of the Law School are an essential University need if the Law School is to develop to that position of preeminence which it should hold. Since, in the reports of previous years, specific needs have been set forth with extended explanation, it seems sufficient to repeat only an enumeration of the more important of these.

The experience of each year adds emphasis to the desirability of providing housing accommodations for law students.

Endowment for professorial salaries are essential for the needed enlargement of the faculty, and perhaps even to enable us to meet competition and to maintain the faculty at its present size.

In view of the long existing economic depression, the lengthened duration of a legal education with its consequent increased cost has multiplied the number and the needs of deserving students who are ambitious and qualified for admission to practice. An endowed scholarship fund would tend to relieve the stringent handicaps of such students and would replace some of the existing free tuition scholarships with tuition payments which would then become a part of the unrestricted income of the University.

The library appropriation available for the purchase of books and the expense of binding has been increased in the past two years from \$9,000 to \$11,425. The latter figure includes \$1,025 which is the income from the Charles Edward Van-Cleef Memorial Fund. Even to maintain our library at its present completeness and to retain its relative standing with other law libraries, additional funds are needed.

THE LAW LIBRARY

The number of volumes accessioned, 3,528, was substantially the same as the year before. The number of volumes given to the Library was 50% greater. Of these gifts, only one-half were accessioned, but the remainder constitute a valuable source for replacement of worn books and for occasional trading purposes. The largest gift, numbering 550 volumes, was from the library of Hon. Leonard C. Crouch, '91, formerly Associate Judge of the New York Court of Appeals.

I am glad to record two instances of cooperation between Professor Kinkeldy, University Librarian, and Professor Morse, Law Librarian, which have resulted in economy and benefit to the University as a whole. For a long time, we had been searching for a set of the Statutes of the Realm of England, but, because of their rarity, had been unable to obtain an offer for a complete set. The University Library has an incomplete set which, by agreement, will be transferred to the Law Library as a permanent loan upon condition that we locate and procure the missing volumes. A similar arrangement has been entered into with regard to the British Foreign Papers, the present price of which makes a new purchase prohibitive. The incomplete set in the University Library will be added to the Law School's International Law Collection, as a permanent loan, upon the understanding that we will complete the set and maintain a subscription for the current volumes.

Complaints have been made continually by students that the lighting at the tables in the reading room is inadequate. Experiments carried on during the year at one table have developed a lighting system that is both more economical and satisfactory. It is expected that a complete installation of this new system will be made during the summer.

With the benefit of N. Y. A. assistance, the work of recataloguing the library has gone forward with satisfactory progress. Of the total of nearly 93,000 volumes, approximately 72,000 have now been catalogued.

THE STUDENT BODY

Registration in the Law School for the past five years has been as follows:

	1935-36	1936-37	1937-38	1938-39	1939-40
Third Year	55	47	54	57	55
Second Year	53	60	53	56	54
First Year	92	83	71	73	97
	<hr/> 200	<hr/> 190	<hr/> 178	<hr/> 186	<hr/> 206
Graduate	3	2	1	0	1
Special	0	0	0	0	1
	<hr/> 0	<hr/> 0	<hr/> 0	<hr/> 0	<hr/> 1
Total	203	192	179	186	208

During the year the degree of LL.B. was awarded to 55 students. The LL.M. degree was conferred upon one candidate.

Both the number of applicants for admission as First Year Students and the number of those denied admission was greater than in any previous year.

During the past two years, the percentage of shrinkage between the first and second years has been gratifyingly less. The number who may voluntarily withdraw after the successful completion of the first year remains unpredictable, but the percentage dropped at the end of the first year for scholastic reasons has been reduced as a result of the more intelligent application of tests for admission.

ACTIVITIES OF THE FACULTY

The following is a list of publications by members of the Faculty:

Professor Laube: "A Glossatorial Study", *Georgetown Law Journal* (March 1940). "A View of Rodell's 'Woe Unto You Lawyers!'", *Cornell Law Quarterly* (June 1940).

Professor MacDonald: "Should There Be a Continually Functioning State Agency Charged with the Duty of Following the Decisions of the Courts of Review in the State and of Presenting Bills to Eliminate or Modify Undesirable Precedents," 14 *University Cincinnati Law Review* 308. "Statutes Recommended by the New York Law Revision Commission", 11 *N. Y. State Bar Association Bulletin* 147. Editor, 1940 Report, Recommendations and Studies of the New York State Law Revision Commission.

Assistant Professor Morse: "A Check List of Judicial Council Reports from their Beginning through 1939", *Annual Handbook of National Conference of Judicial Councils*. "State Tax Commissions—Their History and Reports", appearing monthly in "Taxes".

Professor Robinson: "Arbitration in Admiralty", *New York University Law Quarterly Review* (May 1940).

Professor Stevens: *Book Review*, Ballantine and Lattin, *Cases and Materials on the Law of Corporations*, 7 *Univ. of Chicago Law Review*, 192.

Professor Thompson: (In collaboration with Edwin M. Bohm, Esq.) *First Supplement to Revised Edition of Williston on Contracts*. *Book Reviews*: Perling and Coen, *Wage Rate Laws on Public Works*, 25 *Cornell Law Quarterly* 155; Owens, *Business Organization and Combination*, 25 *id.* 329.

Assistant Professor Washington: "Litigation Expenses of Corporate Directors in Stockholders' Suits", 40 *Columbia Law Review* 431. "Stockholders' Derivative Suite: The Company's Role, and a Suggestion", 25 *Cornell Law Quarterly* 361. *Book Reviews*: Mariano, *The Busch Jewelry Labor Injunction*, *Cornell Law Quarterly* (June 1940); *Encyclopedia of Corporate Forms*. Vol. III, 25 *Cornell Law Quarterly* 150.

Mr. Baer and Assistant Professor Washington: "Lawyers, Taxes, and the Supreme Court", 25 *Cornell Law Quarterly* 537.

Professor Wilson: *Cases on Torts*, Second Edition; *Book Reviews*: *American Law Institute's Restatement of Torts*. Vol. IV, 25 *Cornell Law Quarterly*

331; James Kent, *A Study in Conservatism*, 24 *id.* 478; Dobie & Ladd, *Cases on Federal Jurisdiction and Procedure*, *Cornell Law Quarterly*, (June 1940).

In preparation by members of the Faculty are the following:

Professor Laube, a case book on the Law of Wills and the Administration of Decedents' Estates.

Professor MacDonald, (in collaboration with Professor Reid of the University of Minnesota Law School) a case book on Legislation.

Professor Robinson, a text on The Law of Insurance.

Professors Stevens and Washington, a case book on The Law of Private Corporations.

Professor Thompson, a case book on The Law of Contracts.

Professor Burdick continued as Chairman and Professor MacDonald as Executive Secretary and Director of Research of the New York State Law Revision Commission. Professor Stevens continued as Chairman of the New York Commission on Uniform State Laws and attended the National Conference of Commissioners on Uniform State Laws held at San Francisco in July, 1939.

Professors Farnham, Keeffe, and Robinson have acted as research consultants on specific topics for the Law Revision Commission.

With Hon. William L. Ransom, '05, and Hon. William O. Douglas, Professor Stevens served on the American Bar Association's committee for the award of the Ross Essay Prize. Professor MacDonald is a member of that Association's Junior Bar Conference Committee on Relations with Law Students, and is New York State Director of the Association's Survey of the Administration of Justice. Professors MacDonald and Whiteside are respectively members of the New York State Bar Association Committee on Legal Education and Committee on Cooperation with the Law Revision Commission.

Assistant Professor Morse served one year as president-elect of the American Association of Law Librarians, and has recently been elected president of that Association.

Professor MacDonald participated in the Symposium on "The Status of the Rule of Judicial Precedent" held at Cincinnati in February under the auspices of the Ohio and Cincinnati Bar Associations and the University of Cincinnati Law School. He spoke at the annual meeting of the Federation of Bar Associations of the Sixth Judicial District of this state, delivered addresses before the bar associations of the counties of Oneida, Rensselaer, Steuben, and Tompkins, and gave three lectures before the New York State Sheriffs' Association.

The usual luncheon of Law School alumni was held in connection with the meeting of the American Bar Association in San Francisco. The Cornell Law Association held its annual meeting in Ithaca in November and sponsored two dinners, one in February in New York City when the President and the Dean were the speakers, and one in May at Rochester at which the Dean was one of the speakers. The latter dinner was given as a testimonial to Hon. Harley N. Crosby, LL.B. '07, who had been elevated to the position of Presiding Judge of the Appellate Division of the Supreme Court for the Fourth Department.

PLACEMENT SERVICE

As a result of the stimulating enthusiasm and the conscientious labors of Assistant Professor Keeffe, the School's organized placement service has become increasingly effective, both for members of the Third Year Class and for graduates of prior years. Particularly successful has been the New York City committee under the chairmanship of Hon. George R. VanNamee, LL.B. '02, and under the active direction of Benjamin L. Barringer, LL.B. '33. It was due to their leadership that the winter dinner of the Law Association was arranged as a means of increasing the solidarity of the New York City alumni and of intensifying their interest in the placement service and in other Law School problems. In spite of the existing economic conditions, the efforts of Professor

Keeffe and the various regional committees have given Cornell graduates an enviable placement record.

LAWYERS' INSTITUTE AT CORNELL

In the last Report, mention was made of the projected Lawyers' Institute, suggested and organized by the Law School and sponsored jointly by it and the Federation of Bar Associations of this judicial district. This first attempt here at post-graduate instruction in law was held in the Moot Court Room on August 17, 18, and 19. In spite of the delay in giving publicity to the venture, caused by difficulties encountered in the initial planning, the Institute was attended by 115 practicing attorneys, many of whom came from outside of this district. The University dormitories provided quarters for those who wished to remain in Ithaca during the three-day session. An enrollment fee of \$10 was considered necessary to meet the expenses of the Institute, but it was operated with such economy that \$5 was returned to each member.

The following was the program:

THURSDAY, AUGUST 17

Morning Session

Real Property and Mortgages: Allan H. Treman, Esq., Ithaca; Carl Crandall, Professor of Civil Engineering, Cornell University.

Afternoon Session

The Use of an Office Check List in Connection with Real Property Transactions: Leland H. Notnagel, Esq., of Marshall, Melhorn, Davies, Wall & Bloch, Toledo, Ohio.

FRIDAY, AUGUST 18

Morning Session

Trial Practice in Civil Actions:

- (a) The plaintiff's case: Hon. David F. Lee, Norwich, N. Y.
- (b) The defendant's case: Lloyd P. Stryker, Esq., New York City.
- (c) The court's point of view: Hon. Riley H. Heath, Justice of the Supreme Court of the Sixth Judicial District.

Afternoon Session

Bankruptcy; Administration of Insolvent Estates; The Chandler Act: Harold P. Seligson, Esq., of Marshall, Bratter & Seligson, New York City, Director of New York Practicing Lawyers' Institute.

SATURDAY, AUGUST 19

Morning Session

Trust Estates and Taxation: Horace E. Whiteside, Professor of Law, Cornell University; William B. Flannery Esq., of Sayles, Flannery, Collin & Evans, Elmira.

In formulating this program, the aim was to select topics which would be of lively interest to the members of the bar and to insure a method of presentation that would be of practical value to them. This first attempted Institute fulfilled its object so well that there has been a demand, to which we are responding, for a second Institute to be held at the Law School this coming August.

ROBERT S. STEVENS,
Dean of the Law School.

APPENDIX V

REPORT OF THE DEAN OF THE MEDICAL COLLEGE

To the President of the University:

SIR: I have the honor of presenting the following report for the Medical College in New York for the academic year ended June 30, 1940.

Each year for the past four or five years, I have endeavored to point out those changes within our institution, and in our relation with other institutions, which we believed would make for greater efficiency in teaching and research. These changes have been in part due to an endeavor to improve our methods of operation. Changes of this sort have not ceased and there is still room for improvement in certain directions. As one looks back over the past year it seems that for both the Hospital and the Medical College, it has been a year in which we have settled down to work with greater assurance and with greater efficiency than at any time since the College moved into its new quarters. This is largely due to the loyalty of the staff and its fine spirit of cooperation.

CHANGES IN ORGANIZATION

Among the more important changes during the past year has been the revision of the University Statutes. In a number of respects, these have been brought into accord with the practice established by custom and usage in the Medical College in New York. Among the constructive changes is the reconstitution of the membership of the Medical College Council. The number of regular trustee members has been increased from three to four. In addition to this, provision has been made for alumni representation on the Council; one member of the alumni body to be appointed by the Medical College Alumni Association and the other by the Board of Trustees. This will provide the Medical College with the direct contact with its alumni so much needed. The functions of the Medical College Council have been redefined. The resulting arrangement is particularly gratifying to the Medical College Administration.

We are glad to note that Mr. Barklie Henry has been elected President of the Society of the New York Hospital. His keen interest in matters of education and research bring great assurance of the success of our joint venture.

CHANGES IN BUDGETING

During the year the Department of Psychiatry was placed on the Joint Budget and its accounts handled through the College Business Office. Through the generosity of the New York Hospital, the entire budget of this department is supported by their funds. As a result of this arrangement, the finances for research and education in the joint institution, with the exception of portions of the budgets of the Departments of Pathology and Radiology, are now being handled through the Medical College Business Office.

NEEDS

We believe that all departments should be organized on such a basis that there may be included in each department a second in command qualified for professorial duties. This is not at present the case. In general there is the tendency to develop a situation wherein well qualified heads of departments are obtained, but wherein the lower brackets in academic rank are not as well paid as they should be and there is an insufficient number of workers. This applies also to the non-professional assistant group such as dieners, laboratory helpers, animal caretakers, technicians, and so on.

I have recently been much impressed in an inspection of a research institute maintained by a commercial company by the fact that, in such an organization, they were able to employ sufficient technical help so that efficiency was promoted by the professional staff being freed of a certain amount of laborious

(manual) detail, thus enabling them to devote greater time to the solution of the problem in hand.

Such complete staffing is impossible in most educational institutions. Furthermore, personal effort in the instruction of students and the care of patients are the primary objectives of the Medical College and the Hospital. There are, however, individuals who devote most, if not all, of their time to research—but these are few in number, and it would seem that in an educational institution the entire staff should undertake some instructional duty in order to promote a complete understanding of educational practice and unity of spirit.

The attainment of a satisfactory staff, qualitatively and quantitatively, depends in part upon the availability of money resources with which to support the individuals who are inclined to join the staff of the school and the hospital. The income from endowment is the backlog for such purposes.

In recent years it has become the custom for individuals of means to set up foundations for the dispensation of such funds as they desire to devote to various fields in education and research. Endowment funds of many institutions have suffered on this account. The situation is indeed serious for the educational institutions. Although the objectives are laudable, the efficiency of the method carried to the extent that it is today is debatable. Foundations require an administrative staff and an overhead expense. In a sense this duplicates that of the educational institution. Monies are granted for certain projects and for limited time. Where an educational institution is dependent to a large extent for its research program on such grants, the problem of what is to be done in respect to the research staff at the expiration of the grant is a difficult one. Today, many institutions are unable to add to their staffs promising young men who have found themselves in research and education through the encouragement and support of temporary funds. This was not the case in the day of few foundations and few grants; but where, as today, an ever increasing amount of money for research is being thus applied to the detriment of endowments under control of the educational institution itself, the method is soon likely to lead to the inability of the educational institution to make plans for research over a period of years and to maintain a qualified staff who do not face uncertainty for themselves from year to year. Yet if it were not for the grants of funds made available by numerous individual donors, foundations, and commercial companies interested in our work, we would greatly suffer not alone in our research program, but in our educational work also. The point which should be clearly made is that foundations and restricted funds are not to be condemned, but at the same time endowments for educational purposes must not be neglected, for, after all, they are the mainstay of the educational institution.

RESTRICTED FUNDS FOR RESEARCH

The Dean's last report published a statement of grants for research received by the school for a five-year period including the year 1938-39. The sum for that year was \$266,580.98. For the year 1939-40 it is \$237,285.22. There has been received from the New York Hospital from "full time fees" to the Special Fund for Research \$33,755.75. In addition there has been received and applied to research projects in the clinical departments by the New York Hospital, \$64,938.02; making the total applied through the School and the Hospital for research projects, \$335,978.99.

To complete this picture, cognizance should be taken of direct contributions to the partial or complete support of staff members associated in their work with other closely related organizations, such as the Commonwealth Fund, the Children's Bureau of the United States Department of Labor, the United States Public Health Service, The Works Progress Administration, the New York City Department of Health, the Milbank Memorial Fund, and The National Committee on Maternal Health. The funds applied from these sources amount to close to \$150,000, and have been devoted to social studies, health care, research, and education closely interwoven and coordinated with the work within this institution.

RESEARCH

The Medical College has received requests for a report of its research but due to the stringency of funds, the minimum of clerical assistance available, and the extra work required of the staff in compiling and editing such a report, it is necessary for the time being that this study be deferred to a later date. The results of all research are published in scientific papers which are collected properly in our library.

I have before me the reports of each department. They are brief, skeleton reports in regard to research and teaching with sometimes bibliographical addenda. They, themselves, give merely an indication of the activities of these departments, and yet they comprise more than one hundred and twenty-five typewritten pages. Heretofore I have called attention to these reports. Each year they have been bound and filed in the Dean's Office. Only by reading these can an adequate indication of the work of this school be obtained.

In addition to these reports, the clinical departments publish a report each year under the auspices of the Society of the New York Hospital, and these may be obtained at that source. There are also the monthly statements and the annual summary of the Business Office listing all grants for research and briefly stating the title and purpose of the research projects. Copies of these are supplied to the President's Office, the Administration of the New York Hospital, which is a partner interested in most of the projects, and to members of the Council of the Medical College.

However, the following brief reference to the research now being carried out may be made with the certainty of neglecting mention of many worthy projects. Space does not permit its being a complete summary and many projects whose future significance may not now be apparent have been omitted. These studies have received substantial financial aid from many foundations and individual donors.

Anatomy: Members of the Department of Anatomy have been cooperating in the editing of a monograph by the late Charles R. Stockard which was in preparation by him at the time of his death. It summarizes his studies in genetics over a period of twelve years. The memorial volume will include Dr. Stockard's manuscripts and contributions of his collaborators. The volume is made possible through the generosity of the Rockefeller Foundation which supported the studies.

In addition to the above, some of the investigation carried on in this department includes: Studies on the innervation of the heart; distribution of the cardiac nerves, with special reference to the identification of the sympathetic and parasympathetic postganglionics; the relation of estrogen therapy in the human to carcinogenesis; influence of the nervous system on bone and joints; a study of somatic responses elicited by stimulation of the hypothalamus and subthalamus.

Biochemistry: This department, through a generous grant from the National Cancer Committee, has established a laboratory on tissue metabolism for the study of tissue reaction which is fundamental to cancer metabolism. In connection with this work, one of the most important studies has been the determination of the total *d*-aminoacid oxidase. Other important studies include the investigation of vitamin H. Another problem on which satisfactory progress may be reported is the study of the relationship of choline to sulfur metabolism.

Bacteriology and Immunology: This department reports a comprehensive investigation on the occurrence of serologically reactive substances in sucrose reagents and in the commercial sugars that are used as food in this and in other countries. This investigation is still in progress and when completed will illustrate a new kind of application of serological methods for the detection of hitherto unrecognized constituents of many common foods. Another study of special interest is the work on influenza virus.

Medicine: The research work of this department has been extensive and outstanding. Among the many projects are included studies of the epidemiology of infectious syphilis; investigations of lymphogranuloma venereum; immunity in

hay-fever; special research on arthritis, diabetes, and poliomyelitis; neurological investigations on the threshold of pain and the abolition of pain by drugs.

Obstetrics and Gynecology: This department calls special attention to the work now being conducted on the problem of eclampsia. The Department of Biochemistry is cooperating closely with the Department of Obstetrics and Gynecology in these chemical investigations.

Pathology: The Department of Pathology has been most active with research during the past year. The following projects are among those noted: studies on leukemia; chronic infections; study of the changes accompanying senility, in cooperation with the Department of Animal Husbandry at Ithaca; and studies or pathological changes accompanying sickle cell anemia.

Pediatrics: The research of this department includes a number of fundamental and clinical studies, among which are: Vitamin D in the prevention and cure of infantile rickets; a comprehensive investigation of the nutrition of adolescents; studies of rheumatic fever in childhood; studies of blood dyscrasias in childhood; and work on various phases of childhood tuberculosis.

Pharmacology: This department has contributed valuable research during the year just ended. Among the studies are included: the mechanism of digitalis action in abolishing heart failure; bromide studies; a comprehensive study of the pharmacology of silicates; studies on the absorption of alkaloids. Also of special interest have been the Conferences on Therapy in collaboration with the Department of Medicine.

Physiology: In this department special mention should be made of the research in metabolism, including: the metabolism of d- and l-xylulose in the depancreatized dog; diabetes insipidus in the hypophysectomized rat; relation of age, nutrition, and hypophysectomy on the absorption of dextrose in the gastrointestinal tract; the metabolism of human spermatozoa. Endocrinology.

Psychiatry: The Department of Psychiatry calls special attention to the investigations into somatic factors of personality disorders. Extensive investigations are under way in an attempt to clarify the factors of dehydration and unexplained-leucocytosis. Research in mental hygiene is being carried out in a study of the family in relation to sickness and health care, in cooperation with our Department of Public Health and Preventive Medicine.

Public Health and Preventive Medicine: Research in this department includes studies on the following subjects: nutrition; tuberculosis case finding; the epidemiology of pneumonia; and the study of influence of economic and social factors upon illness. In addition, Professor Smillie has made noteworthy surveys and health studies for the City of Rochester, New York.

Radiology: This department has contributed its share of investigative work, among which should be mentioned the x-ray treatment of inflammatory conditions, and x-ray diagnosis of soft tissue tumors. The department has been actively interested in the problem of silicosis.

Surgery: This department reports many interesting research projects, among which are included: Studies on hypertension in animals and patients; on the effect of direct irradiation of the brain in animals; on cerebral arteriovenous fistulae and on the sensitivity of intracranial structures to painful stimuli. The significance of acidity in post-operative gastric cases, and methods of resecting the lower oesophagus and transplanting a portion of the pancreas into the stomach are further problems under investigation.

NEW FELLOWSHIPS AND SCHOLARSHIPS

During the year Mrs. Ruth E. Ledyard established a fellowship known as The Lewis Cass Ledyard, jr. Fellowship, in memory of her late husband, Lewis Cass Ledyard, jr., for many years a governor of the New York Hospital. The capital value of this fellowship is \$100,000 and the income is awarded annually by a special committee appointed by the Joint Administrative Board. The pur-

pose of the Fellowship is to provide special funds for research to outstanding young men in the broad field of medicine who will conduct such research while in residence at the New York Hospital-Cornell University Medical College Center. This fellowship is now in effect and has been awarded to Charles O. Warren, jr., M.D. and Willis F. Evans, M.D.

The Jeremiah S. Ferguson Scholarship was established by the Trustees in memory of the late Jeremiah S. Ferguson, who throughout his long connection with the Medical College of somewhat more than forty years had devoted himself to helping students with their individual problems and promoting their professional careers. Dr. Ferguson had been a member of the Departments of Anatomy and Pediatrics and had also served as Secretary of the Faculty for over thirty-five years, succeeding John Rogers, M.D., the first Secretary of the Faculty.

The Charles Rupert Stockard Scholarship was established in 1939 from a fund contributed by a friend of the late Charles Rupert Stockard, Professor of Anatomy in the Cornell University Medical College from 1911-1939. The income from this fund, which will amount to approximately \$400 annually, will be awarded to one or two students who have shown promise in the work of the Department of Anatomy.

The John A. Heim Scholarship, established under the will of John A. Heim, M.D., of the class of 1905, will provide free scholarships in the Medical College for outstanding students in need of financial aid. The scholarships are to be awarded on a competitive basis by special examination.

CHANGES IN STAFF

On November 19, 1939, John Rogers, Professor of Clinical Surgery, Emeritus, passed away. He had been identified with the Cornell University Medical College since its inception in 1898 until the end of his life. He was active to within a few days of his death. Dr. Rogers was the first Secretary of the Faculty of the Medical College. His professional career was long and distinguished. For many years he had generously supported research in collaboration with the Department of Biochemistry on the effect of the ductless glands, particularly the thyroid. Because of his great kindness, enthusiasm, and energy he was greatly beloved and will be greatly missed by his colleagues and the students who knew him.

The transfer of Dr. Hinsey to the Professorship of the Department of Anatomy from the Professorship of the Department of Physiology has been accomplished with a minimum of disturbance to the work of either department. This was due, in a large part, to Dr. Hinsey's energy and understanding, but also in no small measure to the cooperation and loyalty of the staffs of each department. Dr. Hinsey has assumed the duties of the Department of Anatomy, and at the same time carried some of the burdens of the Department of Physiology. There has been no decrease in the efficiency of the teaching nor in the amount of research work being pursued in either department.

We are happy to announce that Dr. Detlev W. Bronk, Eldridge Reeves Johnson Professor of Biophysics of the Johnson Foundation for Medical Physics of the University of Pennsylvania, has accepted the Professorship of Physiology and the headship of the Department of Physiology and Biophysics at Cornell. The Johnson Foundation for Medical Physics is "a pioneer enterprise" in this field, and we are glad to have Dr. Bronk come to us to continue to develop the field of biophysics as applied through physiology and physical methods to the problems of medicine. Dr. Bronk brings with him a number of his staff from Philadelphia.

Dr. John R. Carty, Associate Professor of Radiology, has been appointed to the Professorship of Radiology and continues as head of that department.

Early in the year, Dr. Richard W. Jackson, Associate Professor of Biochemistry, resigned to accept the Directorship of the Protein Division of the Regional Laboratories of the Department of Agriculture at Wyndmoor, Pennsylvania.

During the year we were glad to welcome back Dr. Eugene L. Opie, Professor of Pathology, who for six months had been on leave of absence as visiting professor to the Peiping Union Medical College, Peiping, China. During his stay in Peiping, Dr. Opie devoted much of his time to the study of Pathology and Epidemiology of tuberculosis.

In the Fall of 1939, Dr. Ade T. Milhorat resigned his appointment in the Department of Pharmacology to assume the directorship of the laboratories of the Payne Whitney Psychiatric Clinic of the New York Hospital. In addition to this appointment on the staff of the Psychiatric Clinic, Dr. Milhorat retains his appointment in the Department of Medicine.

Lt. Col. William C. Munly, who has been our Professor of Military Science and Tactics since the Department of Military Medicine was reestablished by the War Department three years ago, has been transferred to the Surgeon General's Office at Washington, D. C.

CURRICULUM CHANGES

An experience of approximately six years with a curriculum in which the medical and surgical specialties were incorporated in the regular clinical clerkship, demonstrated an essential weakness in this method in that ward teaching was constantly being interrupted for assignments in these minor courses. Last year the Curriculum Committee made a study of the matter and recommended to the Faculty a change in the third year schedule to the quarter term system instead of trimesters, and the inclusion of all specialties in the first quarter of the year, leaving the remaining three quarters for the usual clerkships. The results of the first year trial of this system of giving the specialties seem to show that in large measure the advantages hoped for have been attained, and they demonstrate the practicability and pedagogical soundness of this approach.

The past year has seen a reorganization of the surgical work of the Cornell Division of the Bellevue Hospital with resulting closer coordination with the work of the Department of Surgery in the New York Hospital.

Teaching on the Neurological Division of the Cornell Service at Bellevue has been reorganized, with Dr. Harold Wolff and staff cooperating with Dr. Foster Kennedy, Chief of the Service.

STUDENT BODY

During the year the Committee on Admissions, under the able direction of Assistant Dean Edwards, has made a significant study and report on the matter of admissions as it affects Cornell Medical College. The report contains an analysis of the sources of applicants to Cornell Medical College, the type of applicants, the final location of those who have withdrawn after acceptance by the Committee, and what happens to our medical students after they graduate. It is noted that the number of women admitted to Cornell has decreased considerably during the past twenty years. There is also an analysis of performance of applicants admitted for advanced standing. This report is well worth consideration by Trustees and staff who are interested in the problem of admission to our Medical College.

One thousand and fifty applications were received for admission to the first year class, representing students from 172 colleges and universities and sixteen different states. Of the accepted group, twenty-five came from the Arts and Sciences College of Cornell and the remaining fifty-four from thirty-six other colleges.

The Committee on Premedical Education at Ithaca, under Professor V. S. Lawrence, has been of great help to our Admissions Committee. In addition, there have been appreciative comments on their work from the Deans of other Medical Schools. It is hoped that this committee will become permanent.

The registration figures for the year 1939-40 are as follows: total enrollment, 291 students. First year, 79; second year, 75; third year, 66, and fourth year, 71. In Section F. of the Graduate School there were registered 16 students: 14 for

the Ph.D. degree, 1 for the M.A., and 1 for the M.S. degree. In addition there were seven special students.

STUDENT PERFORMANCE

The class graduating June 30, 1940, received internships in 45 different hospitals, 17 of which were in Greater New York.

It is very gratifying to note that the State Board Number of the Journal of the American Medical Association, published April 27, 1940, shows that the graduates of the Cornell University Medical College made an excellent record on State Board Examinations. All students who have graduated with the classes of 1937, 1938, and 1939 and have taken the examinations of any state board have passed.

STUDENT HEALTH

The Student Health Department has had a busy year, not only has there been an increase in the number of office calls, but also in the number of follow-up visits and calls to the homes of students. Twenty-eight students were hospitalized this year as against twenty-four for the previous year. This increase is partly due to a large number of upper respiratory infections. There were, however, fewer cases of serious illness.

LIBRARY

In spite of a restricted budget, the Library has grown due to the continued efforts of Mrs. Josephine Nichols, Librarian, and that of the advisory committee appointed from the Medical College staff. Early each Fall, members of the incoming first year class are given a short course in the use of the Library. That this is necessary seems to be due to a shortcoming in the usual college training, since many graduates show unfamiliarity with the method of gaining information from library sources.

COLLEGE MAINTENANCE

The College Business Office continues to function with its usual excellent efficiency. During the year it managed extensive changes in rooms A-503-4-5-6, due to the remodelling of animal quarters. In addition, a good deal of interior painting in buildings A, B, C, D, and E was carried out. We had planned to renovate all the Medical College buildings, but only about half of this has been accomplished due to lack of funds. Our schedule will have to be postponed for another year. Owing to an unusually severe winter, there was a sharp increase in the consumption of high and low pressure steam, but the figures are little more than half of the amount used during the first year of occupancy.

The dog farm of the Department of Anatomy at Shrub Oak has been closed and this excellent property and its extensive modern kennels are now offered for sale by the University.

COOPERATION WITH OTHER INSTITUTIONS

The work of the Kips Bay-Yorkville Health Center, which is the health center for the Kips Bay District, has progressed satisfactorily. There is close cooperation between the City and our Department of Public Health and Preventive Medicine, under Dr. Wilson G. Smillie, which is partly housed in the Health Center Building adjacent to the Medical School, and with various departments in the New York Hospital, particularly the Departments of Medicine and Pediatrics.

The Memorial Hospital, which opened its doors at its new site at the beginning of the present academic year, has become well established in its new quarters. The closer contact which is thus gained between the staff of the two institutions is of mutual advantage and many of our staff and students are enjoying this relationship.

At the request of the War Department, General Hospital 9 has been organized

from the staffs of the New York Hospital and the Cornell University Medical College. The organization of this unit has been under the supervision of Drs. Heuer and Andrus of the Department of Surgery. The staff has been submitted to the War Department for approval. Included are: Dr. Ralph C. Bowers, to be Chief of Surgical Staff, and Dr. Bruce Webster to be Chief of Medical Staff.

Again, I wish to point out that the Medical College is running under a considerable deficit which can not be removed without seriously impairing the efficiency of our teaching unless more endowment is obtained.

During the year Livingston Farrand, President Emeritus of the University, passed away. His enthusiasm, energy, and understanding so constantly devoted to the Medical College were a great help and stimulus to the administration and staff.

WILLIAM S. LADD, M.D.,
Dean, Cornell University Medical College.

APPENDIX VI

REPORT OF THE DEAN OF THE NEW YORK STATE VETERINARY COLLEGE

To the President of the University:

SIR: I have the honor to report on the work of the New York State Veterinary College for the year 1939-40.

The year has not been an especially eventful one. The routine work of laboratories and clinics has been carried out, and the teaching has proceeded without interruption. The faculty has given a good deal of time to a study looking forward to major changes in our teaching program, but this study is still incomplete and the results will have to be reported later.

THE FACULTY

There have been no important changes in the personnel of the faculty. At the beginning of the year, Dr. A. G. Danks was promoted to the rank of Assistant Professor of Surgery and took over, as a part of his duties, the teaching of the principles of horseshoeing which for many years had been taught by the late Professor Asmus. Professor H. H. Dukes and Professor M. G. Fincher enjoyed sabbatic leaves during the second term of the year. Because of war conditions abroad, both have been spending their leaves studying in this country.

THE STUDENT BODY

The student body (undergraduate) numbers one hundred sixty three. So long as we continue to admit approximately forty a year on a highly selective basis as at present, this number will be stabilized at approximately the present level, since experience indicates that very few students now are dropped for scholastic deficiency. The standard of scholarship maintained by our students is far above the level of that of a few years ago, since the poorer students now are weeded out in the process of admission.

The number of applicants for admission continues to increase yearly. This situation is highly gratifying, on the one hand, since it enables us to deal with a student body of high scholastic ability, a situation pleasing to all teachers; but on the other hand it raises some serious questions based upon the fact that the college is state supported. When, as for 1940, nine candidates must be disappointed for each one accepted, it is inevitable that a great deal of dissatisfaction and even enmity will be aroused. The situation requires the refusal of many candidates who have good qualifications and whom we would be glad to accept had

we room for them. Our admissions committee spends a great deal of time on this matter; it interviews personally all who have satisfactory scholastic records, and it makes its determinations on a merit basis with as little bias as human nature will permit. In spite of this, it is difficult, and frequently impossible, to convince those whom we have to disappoint that the committee has acted fairly with them. There seems to be nothing that can be done to prevent the building up of a backlog of dissatisfaction in the State that may eventually react seriously against us. One inevitably makes more enemies, in such a situation, than friends.

The following table indicates the number of applicants that have come before the Committee on Admissions each year since it began to function in 1934. Prior to that date, we were able to accommodate all applicants who could meet our formal entrance requirements. The ratios represent the proportion of the total number that were accepted.

<i>Year</i>	<i>Total applicants</i>	<i>Ratio</i>
1934	116	1:2.9
1935	166	1:4.2
1936	240	1:6.0
1937	276	1:6.9
1938	272	1:6.8
1939	328	1:8.2
1940	389	1:9.7

An important teaching function of the college is the training of teachers and research workers. During the past year, twenty-one graduate students did their major work in the Veterinary College and a larger group was registered for minor requirements. This is a better showing than in any time in the past, yet we could easily accommodate a larger group. Each year we have many applications from excellent prospective graduate students but the greater part of these need assistance in the form of fellowships and assistantships which we are not able to supply.

Our annual Conference for Veterinarians, a short course for practitioners held each year in January, again was very well attended and successful in every way. The registration was over 300, the greater part being from New York State and more than 90 per cent being graduates of Cornell. For over thirty years, the Conference has been a two-day meeting. This year a three-day meeting was tried and proved so successful that in future we shall continue on that basis.

THE CURRICULUM

As medical science becomes more complicated, teaching problems increase. Every progressive teacher in the medical field must constantly revise his courses to keep them up to date, discarding worn-out ideas and substituting new ones. Unfortunately, so far as the teaching problem is concerned, the quantity of new facts and ideas far surpasses those that can be discarded, and every teacher inevitably comes to feel that he must have more time to cover adequately the field that has been assigned to him. The student's time is limited, however, so the medical curriculum comes to be a series of time compromises between the different teaching fields, none of which are served satisfactorily. The only solution to this problem is to extend the curriculum over a longer period of time, as has been done in the veterinary schools of many foreign countries.

During the year two faculty committees have wrestled with different aspects of this matter. Some minor "patching" of the present curriculum has been done, but major problems remain to be solved. Should we seek to require a minimum of two years of college work for admission, instead of one as at present, including in this extra year some of the basic sciences that now are included in the veterinary curriculum? Should we leave the admission requirements essentially as they are but build a curriculum in veterinary medicine five years in length? Can we depart from didactic teaching methods using the case method in greater degree in the clinical fields, and leaving more to the individual

initiative of the student in all parts of the course? These are the principal questions with which we are concerned. I may point out that the solutions are not entirely in the hands of our faculty since any of the departures would mean additional expense, and additional funds are likely to be difficult to obtain. We hope at present to set up ideals, and afterwards to seek ways and means of reaching toward them.

RESEARCH WORK

Practically every staff member has one or more research projects under way. Some of these are completed each year and new ones undertaken. An average of fifteen scientific papers a year are published in medical, veterinary medical, and other scientific journals. The quantity and quality of the publications for this year was well up to the average. Space here will not permit of detailed discussions of the research projects. In the fuller report to the Legislature which will be made later, details of the more important projects will be given. Copies will be sent to those who are interested.

LABORATORY AND CLINICAL SERVICES

Although the complete records have not yet been compiled, indications are that the number of clinical accessions will be about the same as for last year. This number represents near-capacity performance with the facilities and personnel that we have. Several clinical assistants are needed to improve our clinical teaching. Large and varied clinics are invaluable teaching aids, yet the value of large clinics is partly lost when the teaching personnel is not great enough to extract the fullest information and teaching value from each case.

The diagnostic laboratories continue to be well patronized by veterinary practitioners and livestock owners of the State. It is probable that the final figures for the year will show a further increase over last year in the number of accessions.

PHYSICAL FACILITIES

The physical facilities of the College are now fairly good. A conspicuous deficiency is the lack of an X-ray outfit of sufficient size and power for use on large animals. The Department of Physiology lacks adequate animal quarters. The Small Animal Clinic needs a new installation of kennels since the old ones are outmoded, insanitary, and odorous. Additional exercise runs are needed for the Small Animal Clinic. It is hoped that at some time in the future the front of James Law Hall may be remodelled to resemble the Moore Laboratory, thus giving to the College a presentable front.

During the past year a great many improvements have been made in the grounds of the College. With the aid of Works Progress Administration labor, roads and sidewalks have been built, and landscaping has been done. The job is incomplete, but a new project has just been started which should complete the work before the end of the present summer. Several hundred new trees, shrubs, and hedge plants were set out this spring. Within several years, the grounds should offer a very presentable appearance.

OPERATING A BUDGET

For some years, the operating budget of the College has been considerably curtailed because of the necessity of the State to economize. These economies have been made cheerfully but not without considerable inconvenience and sacrifice. The inelasticity of the State's line-item budget makes it particularly difficult to operate under such circumstances. It is hoped that when the financial condition of the State permits, the situation will be recognized and moderate increases in a number of our budget items allowed. Perhaps it is too much to hope that some time the line-item budget will be replaced by a more flexible system.

PRESIDENT'S REPORT

Increasing services and teaching loads warrant moderate increases in the personnel. An extension veterinarian to act as a special contact man between our scientists and the owners of dairy cattle has been sought for some years. Several additional teachers are needed and will be requested in the budget estimates for next year.

THE VETERINARY COLLEGE COUNCIL

In the general reorganization of the administrative structure of the University instituted by President Day, the old State College Council has been abolished and provision was made last year for individual councils for each of the three State Colleges of Cornell. The President of the University will be chairman of all three councils and their membership will be from the Board of Trustees and administrative officers of the University, supplemented by groups of persons outside the University representing organizations having special interests in the welfare and progress of the State Colleges. Each Council will act in an advisory capacity to the administration and Trustees for the College which it represents. It is hoped and expected that the Veterinary College Council will be very helpful in furthering the interests of this College and in planning for its future development.

In conclusion, I should be remiss if I did not express my appreciation of the value to this state-supported college of its association with other parts of Cornell University. It is hoped that its contributions to the University repay, in part at least, this debt.

W. A. HAGAN,
Dean of the New York State Veterinary College.

APPENDIX VII

REPORT OF THE NEW YORK STATE COLLEGE OF
AGRICULTURE AND OF THE CORNELL UNIVERSITY
AGRICULTURAL EXPERIMENT STATION

To the President of the University:

SIR: I have the honor to submit the report of the New York State College of Agriculture and of the Cornell University Agricultural Experiment Station for the fiscal year 1939-40.

RESEARCH

Progress has been made in the solution of many agricultural problems confronting the farmers of the State. The number and the varying nature of these problems are reflected in the fact that during the past year the research program of the Experiment Station comprised a total of 465 separate projects in sixteen departments. The following examples illustrate how science and scientific methods can be of service to agriculture.

Approximately one-half of the farm income in New York State is derived directly or indirectly from the dairy cow. As a result of cost-account and farm-management studies on dairy farms for the past several years, recommendations have been made to dairymen regarding methods of cutting the cost of production of milk. The use of well-established and labor-saving machinery such as milking machines, manure spreaders, hay loaders, and the like, are of value in reducing labor costs. Buildings should be conveniently arranged and well equipped with properly located hay chutes, grain bins, silage carts, and other equipment. Large fields should be arranged so as to use labor as well as machinery most efficiently. Additional information has been obtained regarding

costs, and methods of reducing costs, of feeds, machinery, livestock, seeds, fertilizers, and insurance.

Another approach to the problem of lowering the cost of producing milk is that of artificial breeding. By means of this procedure, sires with superior germ plasm can be used much more extensively than is possible through natural mating; this means more rapid improvement of the productive capacity and efficiency of dairy cows. Research on the problems involved in the technique of artificial insemination is under way at Cornell and at other State Experiment Stations. The progress is such that several circuits are now in operation in New York State, and others are in the process of organization.

Recent research has shown that proper placement of fertilizer is an important factor in the efficient production of many crops, especially vegetables. There is a need for seeding machines which will place fertilizer where it cannot injure the seed and where it will be of the greatest and most immediate aid to the young plants. A machine has been designed and constructed for seeding peas and beans in a grain drill in which single-disc furrow openers permit the placing of fertilizer in a band at the side of the seed, which is dropped through hoe openers so spaced that trash does not collect between them. The advantages of this design of drill have been so evident that commercial machines of this type will soon be on the general market.

Another problem of great consequence to New York State vegetable growers is the extensive damage caused periodically by cutworms. Numerous tests conducted under greenhouse and field conditions have demonstrated that sodium fluosilicate and Paris green are extremely toxic to cutworms and that wheat bran is the best carrier for these poisons. These results have led to the development of a highly effective pre-mixed bait which can be made and marketed at a low price.

Intensive vegetable-crops production characterizes the muck soils of New York State. A constantly increasing acreage of shallow muck, however, is becoming unproductive owing to the incorporation of the underlying marl by plowing. Marl thrown from ditches or burning of the muck has a similar effect. An inexpensive treatment has been found which will correct the difficulty. The treatment consists of the application of 100 pounds of manganese sulfate to the acre. This treatment can be delayed until June, when the unproductive spots become clearly defined, and still be effective.

The labor involved in watering plants grown in greenhouses is a large item in the cost of producing such crops. As a result of recent studies on subirrigation, the Station has developed a practical method of watering plants from below the soil surface. Ornamentals handled in this way receive a uniform amount of water and the foliage is kept dry, thus reducing the danger from certain diseases. The procedure has evoked great interest among commercial florists.

A new soybean variety, Seneca, will be available for use in New York State next year. This new introduction produces about 30 per cent more than does the present popular variety, Cayuga. Although its growing season is from ten to fourteen days longer than that for Cayuga, the new variety grows to a greater height and is easier to harvest. Thus, another source of high protein concentrate has been developed for New York State dairymen. The yellow color of the seeds may make this variety attractive and useful for industrial purposes.

The hitherto costly pre-harvest drop of McIntosh apples may be eliminated to a considerable degree by a single application of a hormone spray, naphthalene acetic acid. Tests conducted in commercial orchards, in cooperation with the Federal Bureau of Plant Industry, have proved the method to be both practical and economically sound. The effects of the spray depend somewhat upon the nutritional condition of the tree, especially with respect to its nitrogen status. The possibility of using the hormone spray as a means of increasing the set of flowers on self-sterile varieties, such as McIntosh apples and some of the sweet cherries, is being investigated.

A complete report covering the entire research program of the Experiment

Station is contained in the Annual Reports of the State Colleges of Agriculture and Home Economics to the Governor and the Legislature.

EXTENSION TEACHING

The present problems of extension administration are to maintain a substantial and effective educational extension service in the presence of serious economic difficulties and widespread social changes; to maintain good working relationships between all agencies of the government and organizations of farmers; to broaden the objectives to include all of the interests of the home and the farm under existing conditions; to put into the hands of rural leaders enough of the right factual material to keep the rural leadership constructive and forward-looking; and to maintain balanced programs with emphasis on the needs of the time.

At variance with expectations of a decline in Farm Bureau membership, such as usually accompanies low and falling prices of farm products, farmers increased their voluntary financial support in the counties. It amounts to about 15 per cent of total county costs of the Extension Service. Appropriations by county boards of supervisors, plus this voluntary financial support, provide about 73 per cent of the cost of carrying the county-agent work. County Farm Bureaus, Home Bureaus, and 4-H Clubs comprise three departments: the Farm Bureau, with a membership of 45,123; the Home Bureau, with a membership of 33,729; and the 4-H Club, with an enrollment of 31,912. These form the nucleus of active cooperators in carrying out an adult and junior program cooperatively with rural people.

Another drought last summer in some areas of the State was the worst in a century. The county-agent organization, with federal aid, gave a large amount of needed and much-appreciated service to about 20,000 farmers in those areas.

Increased attention has been given to marketing and distribution. Guided by extension specialists and aided by several federal and private agencies, surpluses of several kinds of fruit and vegetables were moved at better prices than at first seemed probable. Milk marketing is still a difficult problem, but the Extension Service has exerted great influence in preventing more widespread and more violent agitation about prices. Also the agricultural economists gave valuable assistance in the presentation of cost data at hearings on the milk-marketing orders and to officials in key positions.

Approaching the milk-marketing situation from another angle, the Extension Service has helped farmers to reduce costs of production still further, particularly through larger and more intelligent use of home-grown feeds. This has been a major endeavor for the past four years.

Increasing interest has also been shown in the possibility of accelerated progress toward greater productive capacity through artificial insemination. This practice multiplies many times the potential value of sires of proved ability to transmit desired qualities.

The year has brought the usual run of new and baffling problems of a scientific nature. For example, turkey growers have encountered a new turkey disease. In drought areas, malnutrition of certain fruit and vegetable crops produced alarming symptoms, and in other places plant diseases rare in New York became prevalent. Insect pests always cause trouble in periods of dry weather. As has been noted in other reports, the close and effective working relationships between extension and research at Cornell ensure prompt attention to such problems, usually resulting in some satisfactory solution.

Just now the Extension Service is making preparation to function as usefully as possible in the national defense program. In the World War of twenty-five years ago, the College and the Extension Service supplied the leadership and practical operation of the production phase of the State Food Supply Commission. Today, agriculture is very much better organized and better prepared to meet the emergency. Certain programs will have to be shifted into reverse and the functioning of many agencies correlated.

An important preliminary move has already been made. Following informal action taken June 15, 1940, and formally ratified a few days later, the New York Conference Board of Farm Organizations created the New York State Emergency Agricultural Defense Committee. Plans were at once started to organize similar committees in each agricultural county. Both state and county committees are composed of representatives of agricultural organizations and farmer committee representatives of governmental agencies. The purpose of these state and county defense committees is to cooperate with the National Defense Council, the Extension Service, the Colleges of Agriculture and Home Economics, the state and federal departments of agriculture, and other national or state agencies. One of their first jobs will be to examine current emergencies, such as shortages of seed normally obtained from Denmark and Holland. Later, the committee will survey agricultural resources of the State and be prepared to function promptly on any important program.

APPROPRIATIONS

The State appropriations for the fiscal year 1939-40 were approximately \$50,900 less than those for the preceding year. The reductions imposed by the Legislature resulted in a cut of \$35,700 in the maintenance items and \$15,200 in the personal-service items. Additional funds were appropriated to meet deficiencies in accessory instruction, the Farm and Home Bureaus and Junior Extension, and fuel, light, power, and water. There were no appropriations for new research.

With the exception of the Bankhead-Jones funds for extension and research, the Federal appropriations were similar in amount to those for 1938-39. One-half of the increment authorized by the Bankhead-Jones Act was appropriated for research. The final increment for extension under this Act was received, but the supplementary Lever funds and additional Federal Cooperative funds were again decreased in approximately the same amount.

BUILDINGS

The acute need for a new library and classroom building and a building to provide more nearly adequate housing for the Department of Agricultural Engineering still constitutes a major problem in the College. Although the building needs have been pointed out in several previous reports, the problem is so acute that it merits emphasis each year.

THE COLLEGE STAFF

Changes in the staff were somewhat fewer than in the past few years, and noticeably so in the number of deaths to be reported. The following appointments were made subsequent to those previously reported as going into effect on July 1, 1939: Dr. J. Douglas Hood was appointed Acting Assistant Professor of Biology, Dr. George S. Wehrwein as Acting Professor of Land Economics, and Dr. Arthur Jackson Mix as Acting Assistant Professor of Plant Pathology; the first of these appointments was effective at the opening of the first term, the latter two were for the second term only. Dr. Robert B. Musgrave became Assistant Professor of Field Crops with the opening of the second term, and Dr. Thomas E. LaMont served as Land-Use Specialist from November 1 to May 1. Following the retirement of Professor E. A. White at the end of June 1939, Professor Ralph W. Curtis was made acting head of the Department of Floriculture and Ornamental Horticulture for 1939-40.

With the close of the year, Dr. Cornelius Betten resigned as Director of Resident Instruction in the Colleges of Agriculture and Home Economics after a total service of twenty-five years in these Colleges. He leaves behind an enviable record of wise counsel to students and faculty, and an administration characterized by sound judgment of educational organization and practices and unfailing fairness on all occasions. He will continue in the service of the University as the Dean of the University Faculty. The resignations of Dr. P. P. Babiý as

Assistant Curator of Insects, Joseph Oskamp as Extension Professor of Pomology, and Dr. James E. Knott as Professor of Vegetable Crops, took place during the year. Beginning July 1, 1940, Professor Laurence H. MacDaniels, since 1919 a member of the Department of Pomology, assumes the headship of the Department of Floriculture and Ornamental Horticulture. On the same date, Professor Anson Wright Gibson, who has served on the administrative staff since 1916 and who in recent years has had charge of vocational guidance, placement, and alumni relations in the College of Agriculture, becomes Director of Resident Instruction in the Colleges of Agriculture and Home Economics.

We record with deep regret the death of Mr. Albert R. Brand, Associate in Ornithology, on March 28, 1940. His contributions to the study of bird songs and to the recording of bird songs are noteworthy.

THE STUDENT BODY

The most striking feature of the enrollment figures for the past year is the close correspondence with those of 1938-39 in virtually all of the items in the tabulation. It suggests that possibly the various factors that have brought about the remarkable increase in the enrollment of students may have reached an equilibrium.

Four-years students:	1938-39	1939-40
Freshmen	416	418
Sophomores	329	327
Juniors	308	340
Seniors	267	283
Total	1320	1368
Special students:.....	33	31
Two-years students:		
General farming	65	86
Dairy farming	75	75
Other livestock farming	13	13
Poultry farming	18	25
Fruit growing	18	13
Vegetable growing	9	7
Marketing of fruits and vegetables.....	11	5
Marketing of dairy products.....	26	5
Commercial floriculture	17	13
Nursery landscape service.....	9	10
Total	261	252
Winter-course students:		
Agriculture (general)	53	64
Dairy industry	36	26
Poultry husbandry	17	11
Flower growing	11	2
Fruit growing	5	17
Vegetable crops	4	4
Total	126	124
Graduate students	510	488
Summer-session students	929	935
Total	3179	3198
Less number counted twice.....	124	101
	3055	3097

FACULTY MEMBERSHIP

For many years the Faculty of Agriculture has been on record as desiring that members of the College Extension Staff shall have some form of faculty membership. On May 3, 1939, the Faculty made a formal recommendation to that effect, asking that members of the Extension Staff be admitted to full membership in both the Faculty of Agriculture and the University Faculty. The University Faculty gave consideration to this proposal and recommended that not only professors, associate professors, and assistant professors of the extension staff, but also the Chiefs in Research and the Associates in Research at the New York State Agricultural Experiment Station at Geneva, should be voting members of the Faculty of Agriculture, and non-voting members of the University Faculty. At the June meeting, the Board of Trustees took action putting these recommendations into effect.

NEW SCHOLARSHIPS

It is gratifying to announce the establishment of scholarships to be awarded to students newly entering the College. The Roberts Scholarships, first awarded in 1907, while not necessarily so limited, have ordinarily been assigned only to upperclassmen, the quality of whose work can be judged by the record here.

The State Bankers Association, which has over a long period given generous encouragement to the work of the 4-H Clubs, has established a scholarship of an annual value of \$150 to be awarded to a young man who has been a 4-H Club member, the basis of award being financial need, scholarship, and the promise of service to agriculture. A similar scholarship is made available in the College of Home Economics.

The Sears Roebuck Agricultural Foundation has made a gift of \$3000 for 1940-41, to be used for scholarships of \$150 each, the awards to be made to farm boys on the basis of character, scholarship, need, the desire to study agriculture, and on the record of the applicant's activities and interests. The announcement of the establishment of these scholarships has resulted in great numbers of applications from well-qualified farm boys, many of whom cannot undertake college work without aid.

CARL E. LADD,

Dean of the New York State College of Agriculture
and Director of the Experiment Stations.

APPENDIX VIII

REPORT OF THE NEW YORK STATE AGRICULTURAL
EXPERIMENT STATION AT GENEVA

To the President of the University:

SIR: I have the honor to submit the Annual Report of the New York State Agricultural Experiment Station at Geneva for the year 1939-40. During the past year the program of the Station has, on the whole, been continued in line with established policies and practices. A reduction in State appropriations to the Station necessitated certain adjustments in funds for personal service and maintenance. A reduced budget for heat, light, and power created an extremely critical situation. As has been pointed out in past reports, certain activities of the Station, notably the breeding work on the improvement of canning crops and the investigations on quick freezing and by-product utilization of fruits and vegetables, have increased the demands for fuel and power. In order to avoid a deficit in funds appropriated for these items, it became necessary to close the

greenhouses from November 1 to March 1, inclusive. This procedure resulted in the loss of one year in the breeding activities and constituted a serious limitation on the efficiency of the work of the Vegetable Crops Division. The effect on these budget limitations on the functioning of the Station has created a problem which demands serious attention. An increase in the appropriation for heat, light, and power should be granted as soon as possible.

The present work of the Experiment Station is characterized by emphasis on the basic principles relating to farm practice as a foundation for a sound and profitable agriculture. Rural folk recognize the need for, and appreciate the value of, agricultural research in the solution of their many farm problems. Among the more important research projects now under way at the Station are the following:

The manufacture and preservation of fruit juices and fruit-juice beverages; the freezing of vegetables, fruits, and meats; the nutritive values of New York State fruits, vegetables, and meats; improved packaging of cheese; better pasteurization of milk; the influence of light on proteins; and the development of more efficient fungicides and insecticides for the control of diseases and insects affecting fruits, vegetables, and ornamental plants.

The fruit-breeding activities have resulted in the development of many new varieties which are now superceding or supplementing the older varieties. The quality of these new varieties is indicated by the fact that a display of grape seedlings made at the 1939 fruit exhibit at the Massachusetts Horticultural Society was awarded a gold medal and a first prize, and a smaller display of McIntosh apple seedlings also received a first prize. Other important research projects in the pomological field are: the breeding of disease- and insect-resistant varieties; the use of colchicine to induce plant mutations; new and improved rootstocks for fruit trees; new and improved varieties of blueberries; the breeding of hops with a higher resin content; and the control of soil erosion in vineyards.

The sum of \$2400 was appropriated by the Legislature of 1940 to develop an efficient and economical spray program for combatting the grape berry moth. This insect pest of grapes has been causing serious losses, and the additional funds appropriated for research on the problem should aid materially in developing satisfactory methods of control.

STAFF CHANGES

Promotions

Dr. Z. I. Kertesz, from Associate in Research to Chief in Research (Chemistry), effective July 1, 1940; and

C. J. Tressler, jr., from Assistant to Associate in Research (Chemistry), effective July 1, 1940.

Appointments

William C. Haynes, Assistant in Research (Bacteriology), July 1, 1939.

Leroy Everson, Assistant in Research (Seed Investigations), October 1, 1939.

R. F. Holland, Assistant in Research (Dairying), October 1, 1939.

George L. McNew, Associate in Research (Plant Pathology), October 1, 1939.

Claude E. Heit, Assistant in Research (Seed Investigations), November 1, 1939.

Casper R. Bigelow, Assistant in Research (Chemistry), April 15, 1940.

E. F. Taschenberg, Assistant in Research (Entomology), May 1, 1940.

Resignations

Mark Ford, Assistant in Research (Bacteriology), June 30, 1939.

Dolores Weimer, Assistant in Research (Seed Investigations), September 30, 1939.

Edwin H. Davis, Assistant in Research (Chemistry), March 31, 1940.

C. O. Willits, Associate in Research (Chemistry), June 30, 1940.

SABBATIC AND OTHER LEAVES

Walter D. Enzie, Associate in Research (Vegetable Crops), was granted a sabbatic leave of six months from January 1, 1940 to July 1, 1940.

The leave granted Dr. J. M. Hamilton, Chief in Research (Plant Pathology) in October, 1938, but not taken at that time, was used by him from January 1, 1940 to May 1, 1940.

The sick leave formerly granted J. C. Hening, Associate in Research, (Dairying), was extended from October 1, 1939, to October 1, 1940.

FELLOWSHIPS, INVESTIGATORSHIPS, AND GRANTS

The number of industrial concerns sponsoring special grants, investigatorships, and fellowships has increased by nine during 1939-40; renewals of twelve existing agreements were received for carrying on further work in connection with various products.

Cooperative projects with the United States Department of Agriculture, the New York State Department of Agriculture and Markets, and the New York State College of Agriculture are being continued along many lines.

CARL E. LADD,
Dean of the New York State College of Agriculture
and Director of the Experiment Stations.

P. J. PARROTT,
Director of the New York State Agricultural
Experiment Station.

APPENDIX IX

REPORT OF THE DEAN OF THE
NEW YORK STATE COLLEGE OF HOME ECONOMICS

To the President of the University:

SIR: I have the honor to submit to you the annual report of the New York State College of Home Economics, for the year 1939-40. Further details of the work of the College are given in the official report of the College of Home Economics for 1939-40.

RESIDENT TEACHING

The major objectives in resident teaching in the College of Home Economics have been to provide opportunity for its students to continue their general education while obtaining basic preparation in the various subject-matter fields in home economics, to help them to prepare for specialized vocations, and to give them counsel that will aid them in integrating their personal and educational aims.

During the past year the attention of the educational-policy committee has been focused particularly on the third objective, since most of the students of this college must be prepared to support themselves at the end of the four-years course. Three subcommittees were therefore appointed to investigate the preparation required for positions in hospital dietetics, commercial food administration, and other commercial positions in home economics and social work. In accordance with their findings, certain changes were then made in courses already established, new courses were introduced in the Departments of Foods and Nutrition and Institution Management, and apprenticeship experience is to be offered in Institution Management.

For 1940-41, a new committee has been organized to study possibilities in extension education in homemaking, and to formulate policies for the develop-

ment of the program for adults and young people. In this enterprise the Colleges of Home Economics and Agriculture cooperate with the United States Bureau of Cooperative Extension, 39 county and 3 city Home Bureau organizations, and 46 county 4-H Club organizations in the State.

During the past three years, what was formerly known as *student guidance* in this College has developed into a counseling service, which employs the full time of three staff members and the half time of a fourth. It functions as a coordinator for the student body, the staff, and the administration on matters relating to curriculum and to individual and group welfare of students. From a program concerned mainly with the selection of applicants and with vocational guidance, the work in counseling has now grown to include the following divisions: selection of applicants; freshman orientation; individual counseling; vocational guidance and placement; courses in the homemaking apartments; and research in the fields of guidance and personnel.

Under the guidance of the Director of the College a group of seniors and juniors met weekly to discuss with various department staffs the students' point of view in regard to experience afforded by the College and some of the needed adjustments in curriculum. This has proved of considerable worth to the staff and to the development of the students' thinking and active participation in the functioning of the college as a whole. Seventeen students were selected cooperatively by the administration, the department heads concerned, and the student counsellors, on the basis of their interests and free time to participate in various activities in the Departments of Clothing and Textiles and Economics of the Household, the Information and Publications Services, the Library, clerical services, and building supervision. During Farm and Home Week, when the College presents a week of special programs to the people of the State, 6330 hours of participation were given by students.

Members of the Department of Economics of the Household and Household Management and the Counseling Service agreed that the plan inaugurated during the year for including an introduction to personal and family-management problems in the orientation course for freshmen is preferable to last year's attempt at a separate course on such problems.

After a two-years trial of the course *Marriage and the Family*, the staff of the Department of Family Life believes that it will be helpful to many students in the selection of a life partner and in problems of married life. This course, therefore, will continue as now set up.

The Department of Foods and Nutrition, for the first time this year, gave a one-hour elective course in nutrition, to which members of the research and teaching staffs in animal nutrition, plant nutrition, and poultry nutrition contributed lectures. This will become a regular course open to students from every college on the campus.

STUDENT PLACEMENT

For the first time this year, an assistant, newly added to the staff in the spring, took charge of the placement of graduates and students in positions. Conferences concerning summer employment were held with 154 students, and 63 obtained positions in camps, hospitals, stores, hotels, or inns; 18 obtained other miscellaneous positions. Altogether, 93 positions were available.

It has been difficult to meet the requests for graduate students for positions of responsibility. A total of 242 positions were available during the year to graduates, including clerical, secretarial, home-service, promotional, and sales work with business firms; directorship of a housekeeping school; work as governess; teaching in college, high school, extension service, private school, state school, and nursery school; research assistantship; foods-and-nutrition management in college dormitories and union buildings, commercial cafeterias, W.P.A. projects, children's homes, Y.W.C.A. branches, private and state schools, public schools, tea rooms and restaurants; apprenticeship in a museum; associate editorship; work as teacher-consultant in a housing project; writing; and foods-testing.

Of the 109 members of the class of 1940, 101 have been placed, and 11 of those who received advanced degrees during the year have accepted positions.

GRADUATE STUDY AND RESEARCH

The research program of this College is designed in large part to make contributions of practical value to everyday problems of the families of New York State, to approach problems from the point of view of the family, and to use the home as a basis for research.

Many homemakers buy their larger pieces of household equipment on installment credit. One study completed during the year was concerned with store practices in the sale of washing machines on this plan. The results of this work are to appear in 1940 as an Experiment Station bulletin. Another study dealing with the maintenance of felt-back floor coverings in home kitchens will be continued next year. Other research problems in the Department of Economics of the Household and Household Management, which are still in progress, are as follows: types of equipment and conveniences used in farm and village homes for performing various household tasks; determination of practicable methods for the use of homemakers in selecting soaps and other water softeners; and consumer preferences, buying practices, and demand for potatoes.

Since physical, mental, and emotional behavior all play an important part in nutrition, research has been carried on with regard to the behavior relating to the nutrition of 66 nursery-school children over a period of five years.

The problems of the adolescent received attention in a study concerned with the relation between the role of a girl in a club and her role in the family.

A joint project, an investigation of the biological rhythm of women as an aid to the better planning of life in the rural home, was initiated this year by the Department of Physiology and carried out by the Department of Family Life, under the medical supervision of the physician of the nursery school. Scrutiny of the material already accumulated indicates that the present methods are useful and that the data will prove a source of knowledge that will have practical application in the work of women.

Work has been in progress for several years in the Department of Foods and Nutrition on many aspects of research concerning New York State potatoes. Six sections of this were completed this year: the influence of storage period, of variety, and of environmental conditions during the growth on the adhesion of cells of potato tissue treated with pectic solvents and precipitants; the vitamin C content of New York State potatoes grown and stored under various conditions; the effect of water absorption during cooking on several varieties of New York State potatoes; the effect on mealiness of varying the practices used in the baking of potatoes; some effects produced by mechanically increasing the water content of raw potatoes; the blackening of potatoes. Other studies on potatoes will be continued.

The relation between diet and health still remains a major problem. Two dietary studies were completed during the year: a dietary study of a group of teachers living in an institution; and a study of the energy metabolism of twins. The purpose of the second study was to follow changes in energy production as related to body weight, age, and body build, and to determine similarities and differences in the metabolism of identical and fraternal twins and in infants of different heredity but of similar environments.

Additional research in progress in the Department of Foods and Nutrition includes: the effect of some physical and chemical properties of egg white or other ingredients and of procedure on the quality of soft meringue; studies on the vitamin C metabolism of human beings; factors affecting the retention of ascorbic acid during the cooking of quick-frozen vegetables; losses of vitamin C during various methods of cooking rhubarb; losses of vitamin C during various methods of cooking parsnips; and studies on the influence of ascorbic acid and citrates on the calcium and phosphorous retention of preschool children. The last-named study is an attempt to explain certain factors influencing calcium and phosphorous retention in preschool children and the physiological im-

portance of ascorbic acid and citrates in the human body. This work is to be continued next year.

Since little accurate information is available to homemakers concerning the performance during wear of silk, rayon, cotton, and woolen wearing-apparel fabrics, the study of such performance is being continued for the fourth year in the Department of Textiles and Clothing, in cooperation with the specialists and homemakers in the Extension Service, the testing laboratory at Pennsylvania State College, and experiment stations in Rhode Island, Maryland, New Jersey, New Hampshire, and Pennsylvania. The final aim of the study is to gather sufficient information to make possible recommendations concerning the suitability of fabrics for different uses and information that will aid the consumer in making fabric selections.

Research on educational problems within the College has also been carried on during the year. One study of student mortality, completed this year, was an analysis of admissions data of three groups of equal numbers: honor students in the three upper classes, students ranking lowest, and students leaving without receiving a degree. Work is now beginning on a study to find out if an identifiable pattern of interests and achievements exists that differentiates the girl who does well in home economics from the girl who does not. Another study is under way with the purpose of answering various questions in connection with beginning courses in foods and nutrition.

EXTENSION TEACHING

The Extension Service continued to function as it has for the past forty years in making home-economics information accessible to homemakers. This adult education was carried on during the year in 39 counties, 3 cities, and 1065 communities. In order to carry the teaching and administrative load of the work, the home-demonstration agents, specialists, and state leaders trained 13,263 volunteer local leaders.

A significant development in program-planning is the giving of greater consideration to the family as a unit. Specialists, state leaders, home-demonstration agents, and homemakers have been studying the types of land within the counties, the types of agriculture, the outlook for commodities produced in each county, and the social, health, and educational facilities within each community.

The specialists in the departments of the College of Home Economics had the cooperation of seven departments in the College of Agriculture in the development of the programs.

THE STUDENT BODY

The total number of new applicants for entrance for the year 1939-40, including freshmen and advanced-standing students, but not including students in hotel administration or special or graduate students, was 637, as compared with 504 the previous year. Applicants for entrance into the freshman class alone numbered 511. Of these, 125 were accepted, 313 were refused, and 73 either failed to complete application or withdrew before action was taken by the Committee on Admissions. In September 1939, 111 of the accepted freshmen applicants registered in the college.

Applicants for entrance with advanced standing numbered 126, of which number 15 were accepted, 93 were refused, and 18 failed to complete applications or withdrew before action was taken. In September 1939, 15 accepted, advanced-standing applicants registered in the college.

Total enrollment

Student enrollment in home economics (exclusive of hotel administration) for 1939-40 was as follows:

Freshmen	113
Sophomores	121
Juniors	124

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Seniors	109
	<hr/>
Special students.....	467
	12
	<hr/>
Graduate students.....	479
	52
Summer-school students	231
	<hr/>
	762
Less number counted twice.....	20
	<hr/>
	742

THE STAFF OF THE COLLEGE

Exclusive of the Department of Hotel Administration and the members of the administrative staff paid jointly by the College of Home Economics and the College of Agriculture, the College of Home Economics employed, during the year 1939-40, a total of 186 persons, some of them for part-time service. Calculated as full-time employees, this number becomes 143. Divided according to major functions, this full-time number is distributed as follows: resident administration, 5¼; resident teaching, 43½; research, 15; extension administration, 7; extension teaching, 22; clerical, 36½; care of building, 13¾. These figures include members of the staff on leave of absence.

During the same period, the Department of Hotel Administration employed, excluding staff members paid jointly by the College of Home Economics and the College of Agriculture, a total of 39 persons. Calculated as full-time employees, this number becomes 24½. Divided according to major functions, this number is distributed as follows: administration, 1; teaching, 18½; clerical, 4; care of building, 1.

Appointments made during the year were: Eleanor Thomas, placement secretary; Jean Failing, instructor; Marjorie Armstrong, instructor; Mary E. Kerns, instructor and assistant in cafeteria.

Changes in title and promotions during the year were: Mark Entorf, from extension assistant professor to extension associate professor; Pauline W. Fuller, from instructor to assistant professor; Blanche Hedrick, from extension instructor to extension assistant professor; Alida Hotchkiss, from instructor to assistant professor; Margaret Mercer, from instructor to assistant professor; Jessie Rhulman, from instructor to assistant professor; Helen P. Smith, from acting extension assistant professor to extension assistant professor.

The resignation of Alma Scidmore, assistant professor, was received and accepted, June 1940.

The retirement of Flora Rose, Director of the College since 1932, will be effective October 1, 1940, when Mary F. Henry, the present Assistant Director, will become Acting Director.

Leave of absence was granted during the year to Alice Burgoin, first term; Helen Canon, first term (sabbatic); Grace Henderson, first and part of second term; Eunice Heywood, first term; Eva Hill, second term; Alma Scidmore, first term.

CARL E. LADD,

Dean, New York State College of Home Economics.

FLORA ROSE,

Director, New York State College of Home Economics.

APPENDIX X

REPORT OF THE DEAN OF THE COLLEGE OF ARCHITECTURE

To the President of the University:

SIR: I have the honor to present a report of the College of Architecture for the academic year 1939-40.

THE FACULTY

Francke Huntington Bosworth, Andrew Dickson White Professor of Architecture, has been on leave of absence during this academic year and was retired June 30. He joined the staff of the College of Architecture in 1919 and served as Dean from the date of his appointment until 1927. Professor Bosworth, an inspiring teacher and a wise counselor, will be affectionately remembered by the former students of this College who were privileged to study under him. He brought distinction to the College in many ways, more particularly by his contribution to the field of architectural education in a report made in collaboration with Roy Childs Jones entitled *A Study of Architectural Schools*. Professor Bosworth is a Fellow of the American Institute of Architects, a member of the New York State Board of Examiners of Architects, and a member of the Architectural Advisory Council of the University.

John N. Tilton, jr., Professor of Architecture, was granted sabbatic leave the second term of this academic year.

Edward Lawson was appointed Associate Professor of Landscape Architecture by the Board of Trustees at their April meeting.

Eric Gugler, Fellow of the American Institute of Architects and a practicing architect of New York City, was appointed Associate Professor of Architecture effective at the beginning of the academic year 1939-40. He received his architectural training at Columbia University. Subsequently he traveled abroad and for more than a year made his headquarters at the American Academy in Rome. He won the National World War Memorial Competition held by the City of Chicago in 1924. Among his important work was the remodeling of the Executive Offices of the White House. Mr. Gugler spends three days each week in Ithaca and retains his office for the practice of architecture in New York.

Mr. A. Henry Detweiler was appointed Instructor in Architecture (History) at the beginning of this academic year. He received the degree of Bachelor of Architecture at the University of Pennsylvania and subsequently spent a number of years on archaeological expeditions in Syria, Palestine, Iraq, Transjordan, and Persia for Yale, Pennsylvania, and Michigan Universities.

William McL. Dunbar, Assistant Professor of Architecture, was granted sabbatic leave during the academic year 1939-40. During this period Mr. Dunbar served as Dean of the School of Fine Arts, University of New Mexico.

Professor A. Duncan Seymour was appointed in charge of instruction in Design in place of Professor Bosworth on leave of absence.

Mr. Thomas W. Mackesey, Instructor in Regional Planning, was appointed Secretary of the Faculty.

In June, Professor Young retired as President of the Association of Collegiate Schools of Architecture and was elected a member of the Executive Board.

Assistant Professor Washburn, representing the Department of Fine Arts, continued as Chairman of a Committee to arrange art exhibits at Willard Straight Hall for the benefit of the University community.

THE STUDENT BODY

140 undergraduate students were registered in the College during the past year divided as follows:

	<i>1st year</i>	<i>2nd year</i>	<i>3rd year</i>	<i>4th year</i>	<i>5th year</i>
Architecture	29	28	24	20	9
Landscape Architecture	4	5	1	1	2
Painting and Sculpture	3	4	3	4	3
Total	36	37	28	25	14

Twenty-three students entered with advanced credit or degrees from colleges at Cornell or from other Universities that grant baccalaureate degrees. During the year 9 students were dropped because of inability to keep their work up to the established standards.

The entering class in September 1939 was the largest in the history of the College. This increase was possible because of the small size of the upper classes, thus making it possible to provide adequate drafting room space. The total registration of students in architecture and landscape architecture must be limited to 145 students, the capacity of the drafting room on the fourth floor of White Hall.

Several collaborative teams, each consisting of an architect, a landscape architect, a painter, and a sculptor, competed for the prize offered by the Association of the Alumni of the American Academy in Rome. Of a total of nine teams, five teams from this College received awards—two First Mentions and three Mentions.

CURRICULUM

Beginning in September, 1940, the College of Architecture, the College of Arts and Sciences (Department of Fine Arts), and the Graduate School will cooperate in offering a new course of study to students of the Fine Arts. This course will lead, through six years, to (1) the degree of Bachelor of Arts and (2) the degree of Master of Fine Arts with a major in the history and practice of painting and sculpture.

The first four years of the course will offer a co-ordinated curriculum in the History of Art and in the theory and practice of Drawing, Painting, and Sculpture, designed to give a knowledge and understanding of the Fine Arts in a broad educational program and to provide a basic training for those who wish to pursue further studies in these fields.

The degree of Bachelor of Arts is to be awarded after the first four years and the student may then, after registering in the Graduate School, proceed with two additional years of intensive study of the practice of painting or sculpture, designed to fit him for a professional career in the field of his choice. The degree of Master of Fine Arts is to be awarded upon the successful completion of these years in the Graduate School.

The five-year course leading to the degree of Bachelor of Fine Arts will continue for the present. However, entering students are urged to take the new six-year course.

The fund of \$40,250 made available by the Carnegie Corporation for the work in Regional and City Planning will have been expended on June 30, 1940, with the exception of approximately \$1500 available for the purchase of books and slides. The work in Regional and City Planning, begun in February, 1935, will be continued by the University within the normal provisions of the budget.

PRIZES AND AWARDS

The first Eidlitz Fellowship was awarded to John D. Anderson, B. Arch., 1938, M. Arch., 1939, for travel and study in the United States, Mexico, and Central America during this academic year. The fund for this fellowship was made available through a gift of \$30,000 by Mrs. Sadie Boulton Eidlitz in memory of her husband, Robert James Eidlitz, Cornell 1885. This Fellowship was not awarded for 1940.

EXHIBITION

At the invitation of the Architectural League of New York, the College arranged an exhibition of student work in architecture, landscape architecture, painting, and sculpture. This exhibition opened in the Main Gallery of the Architectural League on April 29, continuing for two weeks.

THE ALUMNI

In accordance with a custom established several years ago, a printed eight-page booklet setting forth items of interest to the alumni was sent to each graduate of the College.

On Saturday of the Alumni Week in June, the College of Architecture Association was reorganized. Mr. George Bain Cummings '12 of Binghamton, N. Y., was elected President and the Representative of this College on the Alumni Association, and Mr. Charles Coleman '12 of Cleveland was elected Secretary.

GILMORE D. CLARKE,

Dean of the College of Architecture.

APPENDIX XI

REPORT OF THE DEAN OF THE COLLEGE OF ENGINEERING

To the President of the University:

SIR: I have the honor to present herewith my report upon the work of the College of Engineering for the year 1939-40.

Millard Clayton Ernsberger, Emeritus Professor of Heat-Power Engineering in the Sibley School of Mechanical Engineering, died January 25, 1940. While working for his engineering degree at Cornell he was an assistant on the staff, and in 1906-1909 was Instructor in Heat-Power Engineering in the Sibley School of Mechanical Engineering. He was then Professor of Mechanical Engineering at the University of Rochester, where he remained until his return to Cornell in 1921 as Professor of Heat-Power Engineering, which position he held until his retirement in 1930. Professor Ernsberger received an A.B. degree from the University of Rochester in 1888 and an M.E. degree from Cornell in 1908.

The Sibley School of Mechanical Engineering has lost one member of its faculty through retirement—Professor Albert Edward Wells. Professor Wells joined the instructional staff of the Sibley School of Mechanical Engineering in 1904 as a foreman. He was appointed Superintendent of Shops in 1905, Assistant Professor in 1912, and Professor in 1916. His title was changed to Sibley Professor of Mechanic Arts in 1920. Professor Wells's skill in the trades he taught, his sympathetic understanding of student problems, and his ability in conveying knowledge of his field to students made him an outstanding member of the faculty.

In the Sibley School of Mechanical Engineering Cyril Waldi Terry was promoted from Instructor in Experimental Engineering to Assistant Professor of Automotive Engineering. In the School of Civil Engineering Claude M. Pendleton was promoted from Instructor to Assistant Professor of Civil Engineering, Trevor Rhys Cuykendall was promoted from Marc Eidlitz Instructor in Civil Engineering to Assistant Professor of Civil Engineering, and Harold Vern Hawkins was designated Marc Eidlitz Instructor in Civil Engineering.

Replacements and additions to the instructional staff have been made by the appointment of the following:

Benjamin K. Hough, jr., Special Lecturer in Soil Mechanics, School of Civil Engineering

Ernest Kenneth Gatcomb, Instructor in Machine Design
 Louis Leslie Otto, Instructor in Experimental Engineering
 Robert Arnold Olsen, Instructor in Industrial Engineering
 Rolland Theodore Hinkle, Instructor in Machine Design
 Chester Edgar Hockert, Instructor in Engineering Drawing
 George Mitchell Robertson, Instructor in Engineering Drawing
 William H. Hyde, jr., Librarian, M.E. and E.E. Library

On October 25, 1939, appropriate exercises were held to commemorate the one hundredth anniversary of the birth of Robert Henry Thurston, Director of the then Sibley College of Mechanical Engineering during the last eighteen years of his life. Dr. Thurston has long been recognized as the leading mechanical engineer of his time, and as the most influential educator in his chosen field. In tribute to Dr. Thurston, the American Society of Mechanical Engineers, of which he was the first president, actively cooperated with the University in arranging the celebration. More than one thousand persons attended the celebration in Bailey Hall at which addresses were made by President Day of Cornell; Vice-President J. P. Adams of Brown University; Rear Admiral Wilson Brown, U. S. Navy, Superintendent of the U. S. Naval Academy; President Harvey N. Davis of Stevens Institute of Technology; Dr. William F. Durand, Emeritus Professor of Mechanical Engineering in Leland Stanford University; and Dean S. C. Hollister of the College of Engineering. At these exercises a portrait of Dr. Thurston, painted by Professor Olaf Brauner, was presented to Cornell University by Bancroft Gherardi, a graduate of the College and Trustee of the University.

On October 21, 1939, the Board of Trustees reenacted and reaffirmed action taken June 19, 1939, that the Engineering College Council therein provided for be continued, under the new Statutes enacted at this meeting. The following appointments to the Council were reported by the President, to begin July 1, 1939:

Edmund Ezra Day, S.B., A.M., Ph.D., LL.D., President of the University
 Solomon Cady Hollister, B.S., C.E., Dean of the College
 Oliver Ellsworth Buckley, B.S., Ph.D., Sc.D., Executive Vice-President, Bell Telephone Laboratories
 Walker Lee Cisler, M.E., Assistant Chief Engineer, Electrical Engineering Division, Public Service Electric and Gas Company
 Alexander W. Dann, C.E., Executive Vice-President, Dravo Construction Company
 Harold Walter Elley, B.S., A.M., Ph.D., Assistant Director, duPont Research Laboratory
 Thomas Midgley, jr., M.E., Sc.D., Vice-President, Ethyl Gasoline Corporation
 James Wentworth Parker, M.E., Vice-President, The Detroit Edison Company
 Colonel Frederick William Scheidenhelm, A.B., C.E., Consulting Engineer
 John Carlton Ward, jr., M.E., President, Fairchild Engine and Airplane Corporation
 John Crosier Wilson, M.E., Vice-President, Cutler Hammer Company

The Engineering College Council met in Ithaca on April 20, 1940, to consider many broad problems concerned with the objectives of the College of Engineering, and the means best calculated to achieve them.

The College of Engineering has continued its policy of cooperating with agencies of the State of New York in giving schools for employees in service, and has acted as host to several conferences of professional societies. The Southern Tier Chapter of the American Society for Metals held two meetings here, November 20, 1939, and May 20, 1940. A school for water works operators was conducted on April 3-5; the Central New York Chapter of the American Foundrymen's Association met here on April 19; a joint conference of the Up-State Student Chapters and local sections of the A.S.C.E. was held on April 27; a school for sewage works operators was conducted from May 4-18.

PRESIDENT'S REPORT

During 1939-40 the College continued operating on a system of selective admissions in all four schools. Reasons for adoption of this system were (1) the increase in the number of applications, a number considerably greater than can be accommodated with present facilities, and (2) the desirability of insuring to the greatest possible degree that the individuals admitted are those most likely to profit by the opportunities offered. The total enrollment for 1939-40 was approximately 10% over that for 1938-39. The enrollment in the freshman class in 1939 was 440, an increase of 19 over that for 1938. The size of the freshman class is being held as nearly as possible to this limit.

The program of the Engineering Experiment Station has been continued and it is planned to enlarge the scope of this significant activity. There has been increased demand from engineers and industrialists for the bulletins and reprints published by the Station.

New equipment has been acquired both by purchase and gift during the year. Acknowledgement of the latter is made to the following:

- American Air Filter Company, Inc.
- The American Foundry Equipment Company
- Pratt & Whitney Aircraft Company
- Hamilton Standard Propellers Company
- Herman Pneumatic Machine Company
- Bell Telephone Laboratories
- Lava Crucible Company
- Ithaca Airport, Inc.
- Westinghouse Electric & Mfg. Company
- Armstrong Cork Company
- Mollenberg-Betz Machine Company
- Anemostat Corporation of America

The College, through the School of Mechanical Engineering, operated for the first time since the World War a ground school in connection with the Civilian Pilot Training Program of the Civil Aeronautics Authority of the federal government. The training was given in cooperation with the Ithaca Airport, which supplied flight instruction. Director Barnard has been in immediate charge of this program.

Amalgamation of the Mechanical Engineering and Electrical Engineering libraries in Sibley Dome was completed. The new quarters for the central library offer better facilities for consulting books and periodicals, and there has been a gratifying increase in the use of published material by our students. The library is open until 10 P. M., and the number of students using it at night has been increasing steadily.

The Herman Diederichs Loan Fund was founded by the Southern Tier Chapter of the American Society for Metals in memory of Herman Diederichs, M.E. '07, late Dean of the College of Engineering. The fund is available for loans to deserving students who have shown a genuine interest and aptitude in the field of metallurgy.

In order to carry out the planned program of development for the College of Engineering, additional space and equipment will be required. This is especially true in the case of the School of Chemical Engineering. Meanwhile, the College is constantly improving the equipment in existing buildings so that they may be used as efficiently as possible. Several of the gifts noted above have been used for such projects as (1) modernizing the foundry, (2) establishing a new constant temperature research laboratory, and (3) improving facilities for aeronautics instruction.

The provision of new buildings and equipment for all schools continues to be of first importance.

S. C. HOLLISTER,
Dean of the College of Engineering.

APPENDIX XII

REPORT OF THE DIRECTOR OF THE GRADUATE
SCHOOL OF EDUCATION

To the President of the University:

SIR: I have the honor to present the report of the Director of the Graduate School of Education for the year 1939-40.

ENROLLMENT

Seven hundred and thirty-three undergraduates were registered for one or more courses in Education during the academic year 1939-40, as compared with 710 in 1938-39. Of these 733, 222 were seniors; 288 were juniors; 211, sophomores; 2, freshmen; and 10, specials. Five hundred and eleven were registered in the Department of Rural Education and 222 in the Department of Education. Three hundred and eight were men and 425 were women.

Information regarding the graduate group is given in the accompanying table. It will be noticed that there has been a slight increase in the number of students.

	1939-40		1938-39	
	First term	Second term	Both terms	Both terms
Number of different students registered:				
a. With Education* as major	55	50	66	62
b. With Education* as minor	38	42	52	46
	93	92	118	108
Number who are candidates for:				
a. Ph.D. (major in Education*)	23	20	24	21
b. Ph.D. (minor in Education*)	17	19	21	17
c. M.A. or M.S.	33	31	41	40
d. M.A.Ed. or M.S.Ed.	10	12	18	22
e. Other degrees	5	2	5	2
f. No degree	5	8	9	6
Geographical Distribution:				
a. Number of different states represented	25	25	27	25
b. Number of foreign countries represented	2	4	4	4
c. Number from New York State	46	47	62	58

*Education or Rural Education.

BUREAU OF EDUCATIONAL SERVICE

The following excerpts from the report of the Chairman, Mr. Lewis Eldred, give information about those activities of the Bureau which will be of interest to the general reader.

"The nature of the work done by the Bureau makes it necessary for us to hold our records open until the middle of November each year. This report contains a summary of the placements for the academic year 1939-40, as compared with those for 1938-39, and a record of the secondary-school placements of students in residence to date for the year 1940-41.

"The following table compares the placements for 1939-40 with those for 1938-39:

	For 1938-39	For 1939-40
Number placed:		
Seniors	71	92
Graduate students in residence	52	42
Graduates in residence	11	8

Graduate students in the field	74		80	
Graduates in the field	50	258	59	281
<hr/>				
Positions filled:				
Through Bureau on direct notice from employer to University	102		115	
Through University outside Bureau	19		22	
Through individual effort with aid of Bureau	27		41	
Through individual effort alone	71		63	
Through outside placement bureaus and commercial agencies	26		28	
Uncertain	13	258	12	281
<hr/>				
Institutions supplied:				
Colleges, universities, and normal schools	65		65	
Private schools	9		14	
Public schools	159		170	
Other institutions	25	258	32	281
<hr/>				

"In spite of the ten per cent cut in New York State aid to Education, the widespread abolishment of teaching positions, drastic reductions in teachers' salaries, and the general feeling of insecurity in the teaching profession, the record of teacher placement at Cornell University for the academic year 1939-40 was, in most respects, the best since this Bureau was established in 1932. The total number of teachers placed was 23 greater than for the previous year and equalled the record established in 1937-38, when 281 Cornell teachers were placed. Senior placement increased by about 30 per cent, 21 more seniors being placed for 1939-40 than for the previous year. The decreased placement among the graduate students in residence was due largely to the fact that salaries in general were not such as to attract graduate students and, as a result, many decided to continue their graduate work rather than accept positions with small remuneration.

"To date the demand for teachers in almost all secondary-school subjects has been markedly less this year than at the same time in former years. This is especially true in the field of vocational agriculture, the chief reason being that very few new departments are being opened. The wave of general retrenchment is still with us and tends greatly to reduce the number of teaching vacancies open to inexperienced candidates. Also, salaries in general tend to be so low as not to attract graduate students with teaching experience."

IMPLEMENTING THE FIVE-YEAR PROGRAM

In the report for last year, the new five-year program for the preparation of secondary school teachers was described and the underlying conceptions briefly stated. The events of the past year have shown more clearly than ever that we are facing serious social, economic, and political problems to whose solution education must make its contributions. The youth problem is, if anything, more serious now than then. The need for an educational program that will prepare young people to deal more intelligently with their various problems is increasingly clear. The evident success of the youth programs of totalitarian states in achieving the objectives of the leaders of those states challenges us to seek improved ways of enabling young people—and old—to live in a *democratic* society. We may learn even from dictators!

All of this suggests the importance of a more functional program of public education; one that will develop ability to meet the problems to be faced whether these are concerned with earning a living, with appreciating the non-materialistic elements in modern life, with becoming a better member of the family unit, or with contributing to the solution of those social and economic difficulties that confront the nation as a whole.

Institutions that prepare teachers have a heavy responsibility in this matter. Their graduates should have a better understanding of these problems than frequently is the case; they should be not only more broadly but more thoroughly trained; they should learn to work with others in developing in pupils abilities required for meeting life's responsibilities. Educational ends, materials, and methods must all be scrutinized and frequently need to be modified to meet new conditions.

To set up the details of such a program so that its objectives may be achieved requires a vast amount of time and effort. During the past year substantial progress has been made in providing the new courses included in the program. The general course in social studies is being offered through the College of Arts and Sciences under the supervision of Professor Julian Woodward. This course, intended primarily for freshmen, presents an overview of significant problems in the various social and economic fields. A second new course, Human Growth and Development, is being offered jointly by the College of Arts and Sciences and the Graduate School of Education, with Professor F. S. Freeman, of Education, and Professor J. W. Papez, of Anatomy, assuming the instructional responsibilities. In preparation for his work with this course, Professor Freeman spent last year at the University of Chicago participating as collaborator in the Division on Child Development and Teacher Personnel. The general purpose of this course is to give scientific knowledge regarding human growth and development, particularly from the point of view of the needs of the secondary-school teacher. To this end material is to be drawn from biology, psychology, anthropology, sociology, and the like. In order that the interests of various University groups may be recognized in the further development of this course, an advisory committee has been appointed to work with the instructors.

The preceding courses are considered not as professional but, rather, as pre-professional courses under the five-year program. A new professional course, Social Foundations of Education, has been established as the result of a report presented by a special committee under the chairmanship of Dr. Howard Anderson and has been offered by him on a tentative basis during the second term of the present year. A committee, under the chairmanship of Professor R. M. Stewart, has made plans for the apprentice teaching, offered in the fifth year and considered to be one of the most significant units in the entire program. Under the plan proposed and accepted by the Graduate School of Education, each student must spend at least eight weeks in some school, where he will assume responsibility, under the direction of a competent teacher and under the general supervision of the University and the principal, for carrying on the activities expected of a teacher in a progressive system.

Committees have been established for the purpose of revising the beginning courses in Educational Psychology and of outlining one in Philosophy of Education, suited to the needs of this particular group of students. A third committee is working upon what is known locally as "the ten-hour unit." This unit is a functional one, undertaking to integrate principles, methods, materials of instruction, evaluation, and the like, for those engaged in practice teaching.

The group working in "the ten-hour unit" has been carrying on some interesting and significant activities during the past year. This group, which includes those persons who have responsibility for observation and practice teaching in the several subjects, meeting on an average of once a month under the leadership of Dr. M. Lovell Hulse, has been giving consideration to the problems involved in making the ten-hour unit a really functional one in the new program. It has analyzed modern conceptions of secondary education with particular reference to the development of a functional curriculum for young people. It has given consideration to the specific courses that should be provided for various groups and has undertaken to lay out a general plan for the cooperation of those working in the several fields—English, home economics, agriculture, social studies, and the like. A satisfactory beginning has been made; much more will be done during the next two or three years.

CONFERENCES AND SIMILAR SERVICES

The Fourteenth Annual Parent-Teacher Institute was held April 8-11, 1940, organizing its discussions about the central theme, "Turning the Spotlight on Educational Progress." Six hundred and thirty-one persons were registered, 625 of them being women. These persons came from 195 different communities and represented 386 different Parent-Teacher organizations. Five hundred and fifty-six of the group were officers of various types: presidents, program committee chairmen, publications chairmen, district directors, council presidents, and the like. Three hundred and sixty attended the Institute this year for the first time.

The Sixth Annual Summer Session Conference, meeting August 3-6, 1939, dealt with "Youth and Occupational Adjustment." Four hundred and fifty-eight persons from eight states participated in the discussion of the more significant difficulties involved in this phase of the youth problem. The 1940 Conference will deal with "Youth and Money Management."

For the second time a summer conference for City Supervisors of Home Economics was held at Cornell in cooperation with the United States Office of Education. This is one of a very small number of such conferences held in various parts of the country for the purpose of discussing the special problems faced by those having responsibility for developing programs in home economics in the public schools. Twenty-three persons were present from thirteen states. Expressions from members of the group show clearly that this Conference is meeting a real need.

The problem of reorganizing local administrative units in the rural areas of New York State continues to be an important one. Although 269 central districts have been established during the last fifteen years, there still remains approximately two-thirds of the rural area of the state to be included in larger administrative units. Even though the 1939 Legislature rejected a bill that would have completed the task, there is a general belief among interested professional workers that effort along this line shall not be relaxed. To this end the Director has been cooperating during the past year with a group representing various educational interests of the State. As a means of stimulating the thinking of all concerned on this matter, a conference was held at Cornell April 10-13. Fundamental questions dealing with the development of a more adequate educational program for rural people were discussed by district superintendents and by representatives from the State Education Department, from the University, and from various other educational organizations in the State. Approximately 135 district superintendents and central district principals were present.

The importance to an educational program of having a teacher-training institution maintain contacts with the schools has always been recognized by those in Education at Cornell. During the year 11 staff members visited approximately 185 schools in New York State. Thirteen members of the staff gave 96 lectures in the State to approximately 20,745 persons. *The Rural School Leaflet*, devoting itself to Nature Study and Science Education, was distributed to 232,080 persons.

SUMMER SESSION

In the 1939 Summer Session 51 courses in Education were offered by 30 instructors, 12 of whom were visitors. There were 598 students enrolled, of whom 330 were men, with 1130 course registrations. Of these, 23 were college teachers; 51 were principals and superintendents; 355, high school teachers; 40, elementary teachers; 46 were employed in various other fields of educational work; and 83 did not hold positions. Thirty-two of the number were candidates for the Ph.D. degree; 101, for the M. A. or the M.S. degree; and 210, for the professional degrees in Education. Three hundred and fifty were registered in the Graduate School. Three hundred and ninety-nine of the total group came from New York State, the remainder representing 32 different states and 5 foreign countries. The registration in Education for this summer was somewhat smaller than for the preceding summer. The major factor in this reduction seems to have been

the introduction of Plan B. This plan, intended for secondary school teachers of experience, undoubtedly (and properly) encouraged a larger enrollment in subject matter courses and consequently resulted in a smaller enrollment in Education courses.

OTHER ACTIVITIES

As indicated in the report for last year, a joint committee representing the College of Home Economics and the Graduate School of Education has been working upon programs for the preparation of supervisors, extension workers, and teacher trainers in Home Economics. Although the deliberations of this committee have not been completed, sufficient progress has been made to warrant a statement in the forthcoming Announcement regarding programs for these workers.

The Graduate School of Education has authorized the appointment of two important committees. The first, under the chairmanship of Professor Lynn A. Emerson, will study problems involved in the preparation of workers of various types for our industrial and technical schools. The second committee, under the chairmanship of Professor Clyde B. Moore, will have responsibility for the administration of library selections. This group will undertake to integrate the activities of the several subdivisions of the Graduate School of Education in order that the addition of important library materials will not be overlooked and that unnecessary duplications may be avoided.

PROBLEMS NEEDING ATTENTION

For the next two or three years at least, the energy of a majority of the staff will necessarily be directed to the five-year program. Next year also the staff will doubtless wish to give much thought to the recommendations of the special committee that is expected to present a report on the reorganization of our course offerings.

However, there are three additional problems that merit early attention and, although we may not have an opportunity to make decision regarding them immediately, some thought ought to be given to them during the coming year. They are: (1) Our curricula for administrators should be restudied. We are having some difficulty in adapting these curricula to the requirements of the several states from which we draw students. Some of these states establish their certification requirements upon quite different principles so that it is not always easy to set up curricula that are both functional and flexible. Furthermore, some of us hold to the view that the school leader of the future needs to be much more familiar with our social and economic problems than he is at the present time. To accomplish this it will be necessary to work closely with representatives of the social studies departments; it may even be desirable to seek special courses for this group. (2) Thought should be given to developing research on a long-time basis. As has been stressed from time to time in these reports, too much of our research is of the piecemeal sort. This can hardly be avoided so long as we are dependent upon the efforts of graduate students and upon such incidental research as staff members can carry on without financial support. Although additional funds seem to be almost essential if extensive research projects are to be developed, something can probably be accomplished through an integration of our present efforts. (3) The Graduate School of Education should study its opportunities for rendering special services to the schools of the State. These services may deal with local school surveys, with curriculum projects, with building programs, with the distribution of certain kinds of visual aids, and the like. While the primary purpose of such services should be the assistance that a trained staff in a teacher-training institution can render the schools, it should be recognized that participation in such activities is practically essential if we who teach in a professional school are to keep ourselves informed as to the problems of our profession.

JULIAN E. BUTTERWORTH,
Director of the Graduate School of Education.

PRESIDENT'S REPORT

APPENDIX XIII

REPORT OF THE ADMINISTRATIVE BOARD OF THE
SUMMER SESSION

To the President of the University:

SIR: I have the honor to submit in behalf of the Administrative Board of the Summer Session the following report of the Session of 1939.

The following appointments to the Administrative Board of the Summer Session have been made:

Professor G. W. Cunningham, for a term of four years, to succeed Professor O. D. Von Engeln, whose term expired November 1, 1939.

Professor O. D. Von Engeln, for a term of nine months, January 1, 1940 to October 1, 1940, to take the place of Professor W. W. Flexner, absent on sabbatic leave.

The vacancy in the Administrative Board created by the death of Dean Richtmyer was filled by Acting Dean B. S. Monroe, already a member of the Administrative Board.

A general Preliminary Announcement of the Summer Session was prepared and distributed in January, 1939. Special Announcements of Summer Session courses in the College of Home Economics, the Graduate School of Education, and the Department of Hotel Administration were mailed to persons interested in those fields of work. Small folders describing the work of the Field School of Geology and of the Conference for City Supervisors of Home Economics were prepared and distributed. The final Announcement of the Summer Session was published in March and 15,000 copies were distributed.

Registration for the Summer Session of 1939 was held on July 3: a holiday was observed on the following day, and instruction began on Wednesday, July 5. Final examinations began on August 11 and the Session closed on Saturday, August 12.

The faculty of the Session of 1939 consisted of 210 members, and included 28 persons from other institutions. A total of 336 courses was offered. Registered students numbered 2062, an increase of 5 over the corresponding figure for 1938. Other significant data of attendance are given in the following tables, which give the corresponding figures for 1938:

ATTENDANCE

	1938	1939
Men	1188	1181
Women	869	881
	<hr/> 2057	<hr/> 2062

ATTENDANCE BY SCHOOLS

University Summer School	1359	1368
State Summer School of Agriculture	773	934
State Summer School of Home Economics	214	232
Summer School of Hotel Administration	135	154
	<hr/> 2481	<hr/> 2688
Less double registrants	424	626
Totals	<hr/> 2057	<hr/> 2062

STUDENTS IN THE GRADUATE SCHOOL

Registered in the Summer Session	649	614
Registered under personal direction	150	147
Totals	<hr/> 799	<hr/> 761

DEAN OF WOMEN

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CLASSIFICATION OF STUDENTS BY DEGREES

Doctor's degrees	16	16
Master's degrees	220	215
Bachelor's degrees	877	910
Undergraduates	584	600

CLASSIFICATION OF TEACHERS IN ATTENDANCE

Colleges and Universities	122	105
Junior and Senior High Schools	567	513
Principals, Superintendents, Supervisors	97	63
Grade Schools	132	73
Others (Normal Schools, Junior Colleges, Business Schools, etc.)	46	61

STUDENTS BY GEOGRAPHICAL DISTRIBUTION

New England	149	145
Middle Atlantic (excl. New York)	264	305
New York State	1240	1222
South	130	112
South West	30	23
Rocky Mountain States	4	0
Middle West	166	157
Pacific Coast	14	7
Foreign countries and Canada	60	87

LOREN C. PETRY,
Director of the Summer Session.

APPENDIX XIV

REPORT OF THE DEAN OF WOMEN

To the President of the University:

SIR: I have the honor to submit to you the following report of the Dean of Women for the year 1939-40.

ENROLLMENT

The number of women students was increased by seventeen over the previous year, making the total number of undergraduate women 1,276. The number of graduate women decreased by seventeen. In order to provide places of residence for the women, the University remodeled one unit of the faculty apartments, 520 Thurston Avenue, thus providing rooming accommodations for thirty-seven. These residents took their meals at Prudence Risley Hall, across the street. Miss Grace Sawyer of Syracuse held the position of Head Resident until spring vacation when she resigned to accept a position elsewhere. Mrs. Rosa M. Frederick of Talboton, Georgia, accepted the position and completed the year. The four units of Balch Halls, Risley, and Sage Halls were used; also thirteen sorority houses, and cottages at 9 South Avenue, 613 Thurston Avenue, 308 Wait Avenue, 5 East Avenue, and 15 East Avenue. The enrollment by classes, colleges, and residences is shown in Table I.

Analysing the enrollment further, fifty-eight girls were daughters of parents one or both of whom were born in a foreign country. These included Austria, Canada, Czechoslovakia, Holland, Finland, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Poland, Rumania, Russia, Scotland, Switzerland, and Wales.

TABLE I
ENROLLMENT BY COLLEGES, RESIDENCES, AND CLASSES

	FIRST TERM					SECOND TERM				
	1940	1941	1942	1943	Total Under-Grads	1940	1941	1942	1943	Total Under-Grads
Balch.....	144	11	157	4	316	1	3	320	134	13
Risley.....	1	101	7	83	192	1	1	193	2	105
Sage.....	2	86	5	110	203	..	..	203	3	82
520 Thurston Avenue..	86	1	34	37	168	..	..	168	1	1
Sorority.....	86	50	105	0	241	..	..	241	37	37
Room and Board.....	13	25	30	11	79	2	2	82	11	50
Home.....	22	32	36	22	112	7	25	144	23	30
Special Permission.....	4	2	2	2	10	..	..	10	1	2
Relatives.....	1	..	..	5	6	2	1	9	..	..
7 Central Avenue.....	2	..	..	..	2	..	5	7	..	..
5 East Avenue.....	1	4	..	13	18	..	..	18	1	4
15 East Avenue.....	..	2	..	17	19	..	1	20	..	..
9 South Avenue.....	..	1	..	16	17	..	1	18	..	..
613 Thurston Avenue..	..	1	1	..	10	..	..	10	1	1
722 University Avenue..	..	..	1	16	17	..	1	18	..	..
308 Watt Avenue.....	1	1	14	1	17	..	..	18	..	..
Rooms.....	1	1	..	..	2	5	75	82	1	1
Apartments.....	1	1	..	..	2	22	25	3	1	1
Commuting.....	1	1	4	..	6	1	3	9	1	3
Non-Resident.....	2	..	..	..	2	..	..	2	..	..
Total.....	283	320	371	334	1308	18	142	1468	269	321
<i>Enrollment by colleges:</i>										
Home Economics.....	109	121	117	111	458	..	..	..	104	122
Agriculture.....	25	46	62	49	182	..	..	..	23	46
Arts.....	129	141	172	166	608	..	..	..	122	143
Architecture.....	6	2	9	4	21	..	..	..	8	4
Medical.....	..	..	..	..	..	..	..	..	..	..
Arts—Chemistry.....	..	..	..	..	..	..	..	..	..	..
Law.....	3	..	1	..	4	..	..	..	..	..
Hotel.....	2	8	4	1	15	..	..	..	3	..
Veterinary.....	5	..	1	..	6	..	..	..	2	5
Fine Arts.....	3	1	3	2	9	..	..	..	5	1
Engineering.....	1	1	2	1	5	..	..	..	..	..
Total.....	283	320	371	334	1308	..	..	..	2	321
<i>Housing of Transfers, First Term:</i>										
Home Balch.....	6	23	9	..	38	1	1	353	333	321
Room & Board.....	1	..	..	..	1	10	4	..	..	..
Cottages.....	..	..	..	..	..	..	..	..	..	..
Approved Rooms.....	2	..	..	..	2	..	..	..	..	..
Rooms.....	..	..	..	..	..	..	..	..	..	..
Commuting.....	1	..	..	..	1	..	..	..	..	..
Risley.....	10	..	..	..	10	..	..	..	..	..
Sage.....	4	..	..	..	4	..	..	..	..	..
Sororities.....	2	..	..	..	2	..	..	..	..	..
Relatives.....	1	..	..	..	1	..	..	..	..	..
Total.....	59	..	..	..	59	..	..	..	..	..

Eight girls were born in foreign countries, one each in China, Switzerland, Argentina, Italy, Australia, Germany, Mexico, and The Netherlands; and one in the Philippines. Thirty-one religions were represented (two indicated "Protestant" and eleven as "none").

SOCIAL LIFE

The following table summarizes the social affairs given by student organizations during the past year. These were registered at the Office of the Dean of Women.

TABLE II

	<i>Informals</i>	<i>Formals</i>	<i>House Parties</i>	<i>Miscellaneous</i>	<i>Total</i>
Organizations having houses	211	58	117	119	505
Organizations not having houses ..	112	26	19	30	187
Total, 1939-40	323	84	136	149	692

SUMMARY COMPARED WITH PREVIOUS FOUR YEARS

	1935-36	1936-37	1937-38	1938-39	1939-40
Informal Dances	266	326	307	314	323
Formal Dances	99	102	124	89	84
House Parties	89	94	58	123	136
Other Functions	51	20	89	144	149
Total Functions	505	542	578	670	692
Number reported by organizations having houses	396	408	428	480	505
Number reported by other organizations (not having houses)	109	134	150	190	187
Largest number reported by one organization	25	17	16	24	16
Number of these groups reporting ten or more functions	6	9	14	14	16
Number of these groups reporting from five to nine functions	38	39	35	50	45
Number of these groups reporting from none to four functions	75	89	84	81	96

EMPLOYMENT

The following summary of the employment secured for women students by this office is compiled by Miss Eleanor Simonds, Assistant to the Dean of Women, in charge of this department.

Chart A shows the number of undergraduate women students in each college who earned a substantial portion of their expenses during the year 1939-40. This includes only those women who did (1) domestic work in families for their room and board, (2) waitress work in university buildings for their board, and (3) earned cash through the National Youth Administration, since those are the three most lucrative methods of self-help. The totals and the percentages are net figures, all duplications being eliminated. It is to be noted that many of the N. Y. A. students are also earning in other ways.

Chart B was made from statistics gathered in the middle of the school year 1939-40 and is much more inclusive than Chart A. An effort was made to obtain figures on all types of self-help in which women students were employed. This includes many part-time jobs on and off the campus. It was possible to secure only the figures of such positions obtained through the office of the Dean of Women. Undoubtedly there was other part-time work secured by students

PRESIDENT'S REPORT

TABLE III, CHART A

FIRST TERM	Arts	H. E.	Agr.	Arch.	Law	Vet.	Hotel	Totals
Earning room and board in homes and dormitory.....	18	38	34					90
Earning board in dormitory, Willard Straight, and Home Economics Cafeteria.....	31	101	28				1	161
Earning cash through the National Youth Administration....	16	29	13		1	1		60
Total.....	65	168	75		1	1	1	311
*Net Total.....	57	153	70		1	1	1	283
Percentage of College enrollment..	9.3%	33.4%	38.4%		25%	16.6%	6.6%	21.6%
SECOND TERM								
Earning room and board in homes and dormitory.....	17	33	31					81
Earning board in dormitory, Willard Straight, and Home Economics Cafeteria.....	31	97	28				1	157
Earning cash through the National Youth Administration....	18	35	17			1		71
Total.....	66	165	76			1	1	309
*Net Total.....	57	146	67			1	1	272
Percentage of College enrollment..	9.6%	32.4%	38%			14.2%	7.6%	21.3%
*Duplicates subtracted.								

through their own efforts or through other agencies. Eliminating as much duplication as possible it appears that 30.4% of the 1,276 undergraduate women were earning some part of their college expenses. It seems safe to say that approximately one third of the undergraduate women at Cornell continue to find it necessary to work. (While only a little over 30% of the total university women are dependent upon self-help, the proportion is much larger in the State Colleges: 47.5% of the college of Home Economics are working and 45.4% of the college of Agriculture.)

TABLE III, CHART B

	Arts	H. E.	Agr.	Arch.	Law	Vet.	Hotel	Totals
Working in homes for room and board (domestic work).....	18	32	32					82
Working in dorm. for room and board (night desk positions)....		6	2					8
Working for meals in Dorm. (waitress positions).....	24	76	20				1	121
Working for meals in Willard Straight (waitress positions)....	7	23	8					38
Working for meals in sororities (waitresses and house managers)	4	8	1					13
Working for cash toward meals (Home Ec. Cafeteria).....		11						11
Working for cash—N. Y. A.	16	29	13		1	1		60
Working for cash—Dorm. Desk....	6	20	3				1	40
Working for cash—Sororities....	3	7	2					12
Working for cash—Dorm. stores....	3	2	1					6
Working for cash—Part-time off-campus work.....	11	21	5	1		1		39
Total.....	102	235	87	1	1	2	2	430
*Duplicates.....	10	21	7			1		39
Net Total.....	92	214	80	1	1	1	2	391
College Enrollment.....	593	450	176	28	4	7	13	1276*
Percentage of College Enrollment	15.5%	47.5%	45.4%	3.5%	25%	14.2%	15.3%	30.4%

Duplications: 6 earned room and board and also did N. Y. A. work
 25 earned board and also did N. Y. A. work
 5 earned board, did dormitory desk work and N. Y. A. work
 2 had concessions for stores in dormitories and did N. Y. A. work
 3 combined occasional part-time work with N. Y. A. work
 1 combined switchboard work and N. Y. A. work
 1 combined dormitory desk work and N. Y. A. work
 38 of the 60 women doing N. Y. A. work were combining it with other jobs.

It would seem from this that, in many cases, N. Y. A. work alone is not sufficient assistance to keep women students in college.

*Includes 5 women students in Engineering, none of whom were earning.

VOCATIONAL INFORMATION

Many girls have been in to talk over vocations and also to read some of the books in the Vocational Library in this office. A few out-of-town speakers have been here for consultation. A study was made of the vocation in which a girl was interested as she entered Cornell, then her choice as made during college days, and what she finally did after leaving college. The correlation was very slight.

In an endeavor to ascertain the vocational aims of senior women students at Cornell University, the following questionnaire was distributed during the last week of the first semester (from January 26 to the second or third week in February, 1940). Out of a class of 283, 265 replies were received, although the questionnaires were not answered completely in every case.

The aim was to compile actual facts about the number and variety of vocations as well as the degree of interest in particular vocations.

TABLE IV
STATISTICS FROM EMPLOYMENT QUESTIONNAIRE

<i>Class of 1940</i>	<i>Arts</i>	<i>H. Ec.</i>	<i>Agr.</i>	<i>Eng.</i>	<i>Hotel</i>	<i>Arch.</i>	<i>Vet.</i>	<i>Law</i>	<i>Total</i>
1. Do you wish employment after graduation?									
Yes.....	103	98	22	1	2	6	3	1	236
No.....	20	5	2	0	0	1	0	1	29
2. Have you secured a positions?									
Yes.....	2	5	2	0	1	0	2	0	12
No.....	114	99	23	1	1	6	1	2	247
5. Does the department in which you major offer assistance in obtaining employment?									
Yes.....	24	83	9	1	2	1	3	2	125
No.....	82	12	13	0	0	5	0	0	112
6. Do you plan to obtain further professional or technical training?									
Yes.....	73	41	13	1	1	4	0	0	133
No.....	50	62	11	0	1	3	3	2	132
7. Have you registered at the University Placement Bureau?									
Yes.....	12	6	4	0	0	1	0	0	23
No.....	104	93	20	1	2	3	2	2	227
Total number of questionnaires returned.....	123	103	24	1	2	7	3	2	265
Number of questionnaires from which no replies were received.....	6	6	1	0	0	2	2	1	18

Ten per cent of those replying to Question I about employment after graduation indicated that they were not interested in any positions. Of the Arts students 16 per cent did not wish jobs, 4 per cent in Home Economics, and 8 per cent in Agriculture. The replies here seemed to be related to Question VI in regard to further professional or technical training. 59 per cent of the Arts students expected to take advanced work. Some of these had made such definite plans that they were sure in February they would not be interested in any positions immediately after graduation. 39 per cent of the Home Economics students were looking forward to some kind of additional training. 50 per cent of all who replied to this question intended to obtain further training after receiving their degrees.

In February only 4 per cent of the women had definite positions planned. The fact that the questionnaire was given out in the middle of the college year, before many students began to think specifically about their plans, might account for this. Also only 9 per cent at this time had registered with the University Placement Office. Several indicated that their papers had not been filed at the

Placement Office but that they intended to do so soon. This question did not take into account, of course, those who would be registering with the Bureau of Educational Service for teacher placement.

The 265 individual students who expressed their preferences named 59 different types of work in which they were particularly interested. (12 of these required Home Economics training exclusively.) Teaching was far in the lead as the first choice of 70 and the second choice of 20. The next popular profession was Merchandising in its different phases, with 12 giving it their first choice and 16 their second. The interest here was equally divided between the College of Arts and Sciences and the College of Home Economics. Institution Management was given as the first choice of 12 students, the second choice of 4.

Social Service work and Secretarial work were well in the top grouping with 22 and 24 first and second choices respectively. Other popular professions were Dietetics, Journalism, and Personnel Work (which seems to cover some rather vague ideas).

The following professions had one vote each for first choice: Consumer Education, Interior Decoration, Engineering, Farming, Indian Service, Occupational Therapy, Psychiatry, Girl Scout Administrative Work, Tax Work, and research in Chemistry, Physics, and Sociology.

LOANS AND GIFTS

The number of girls needing loans is about the same as last year. A number of gifts have been received for grants to women students. The Cornell Women's Club of Syracuse sent \$50 as a gift to a senior, continuing a custom they started some years ago. The Rochester, New York, Alumnae chapter of Delta Delta Delta sent a \$100 loan, without interest, to a senior. The Ithaca Woman's Club again gave a gift of \$25 to a senior woman from Ithaca. The Cornell Dames added some to the general Woman's Loan Fund. An anonymous giver contributed \$200 for a designated student. These generous gifts were greatly appreciated by the recipients. They are not included in the usual list of funds for loans and grants.

WOMEN'S SELF GOVERNMENT ASSOCIATION

The W. S. G. A. has functioned busily and creditably under the able presidency of Patricia Avery. Girls have taken their responsibilities seriously and have been interested in working out general policies and standards as well as handling specific situations for the women, and have worked with the Men's Student Council on standards and procedure for the student body as a whole.

OFFICE ASSISTANTS

Miss Eleanor Simonds completed her thirteenth year as Assistant to the Dean of Women, and has filled this office most efficiently. Miss Margaret Thompson who has had charge of Loans, Housing for Graduate Women, records, social affairs, et cetera, resigned after five successful years in this position, to go back to her home in California.

SUMMER SESSION

The Summer Session enrollment was slightly increased over the previous year. The four units of Balch Halls, Sage Hall, and four cottages were used as residences. The enrollment of women is analysed as follows:

TABLE V

Total number of girls	844
Number of undergraduates*	356
Number of undergraduates 22 years or under	257
Number of students 22 years or under with degrees	38
Number of students 23 years to 59 years with degrees	61

Number of undergraduates living at home or with relatives	26
Number living in dormitories 22 years or under	231

*Undergraduates include all students with no degrees, and range in age from 15 years to 59 years.

R. LOUISE FITCH,
Dean of Women.

APPENDIX XV

REPORT OF THE DIRECTOR OF ADMISSIONS

To the President of the University:

SIR: My report of last year contained comparative tables for the five-year period ending September 1938. These (and a similar compilation for the five-year period ending in September 1933) may be consulted for a longer view than can be comprised in a report of a single year.

In my report last year I pointed out that in the first five-year period (1929-1933) there had been a steady decline in the total number of applications, and that in the second five-year period (1934-1938) there had been a steady increase. This latter trend continued in 1939 with a total of 4581 applications.

This compares with:

4318 for September 1938
2821 for September 1934
2591 for September 1933
3427 for September 1929

The statistics for the several colleges follow, arranged in a tabular form to facilitate comparison with previous reports.

TABLE I

The following table shows the number of applications and the number admitted in September 1939 to each of the undergraduate colleges. Only those have been counted as applicants who actually filed formal application for admission as regular students; persons indicating intent to enter, whether by letter or by interview, have not been included, nor have so-called "special students." Under "admitted" are included those who met all University requirements and the particular requirements of the college concerned and who were notified that they were entitled to matriculation as regular students—whether they afterwards registered or not. (As applications for the Law School, Medical College, and the Graduate School do not pass through the Office of Admissions, they are not included in these figures).

A. Applications and admissions from secondary schools:

	<i>Applied</i>	<i>Admitted</i>
Arts and Sciences	1228	436
Agriculture	858*	412*
Home Economics	499	113
Hotel Administration	179	89
Architecture	59	28
Engineering	776	385
	<hr/> 3599	<hr/> 1463

* These do not include 269 applicants for admission to the two-year special courses in the College of Agriculture of whom 141 were admitted.

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B. Applications and admissions from other higher institutions (not including transfers from one college to another within Cornell University):

	<i>Applied</i>	<i>Admitted</i>
Arts and Sciences	238	78
Agriculture	191	38
Home Economics	111	9
Hotel Administration	76	28
Veterinary	239	15
Architecture	25	14
Engineering	102	46
	<hr/> 982	<hr/> 228

TABLE II

The students admitted direct from secondary schools (see Table I, A) divided as follows according to the method by which each one offered the greater part of his entrance credit.

Certificate from school	495
Regents examinations	944
College Board examinations	23
Entrance examinations	1
	<hr/> 1463

Many of the students offered credit by more than one of the four methods. The following shows the number offering credit by any one of the four.

Students presenting credit by certificate	1399
Students presenting credit by Regents examinations	1099
Students presenting credit by College Board examinations	53
Students presenting credit by entrance examinations	35

TABLE III

ENTRANCE EXAMINATIONS

In September 1939, as for the past six years, the University continued the use of the September examinations furnished by the College Entrance Examination Board. The answer papers were read and graded by members of the Cornell University Faculty.

Total new applicants trying examinations	84
Applicants completing requirements by examination	48
Applicants trying examinations, but failing to complete requirements thereby	36

The proportion of passing grades (60 or above) for all subjects, to the total number of grades reported was 43%.

TABLE IV

Freshmen admitted from private schools in the United States:

From schools in New York State	69
From schools in other Middle States	89
From schools in New England States	54
From schools in other States	57
Total	<hr/> 269

The figures preceding are only quantitative; they do not show the constant effort on the part of the Committees on Admission to the several colleges of the University and on the part of this office to insure high quality among the entrants, not only in scholarship but in character and personality. An examination

of the quantitative figures throughout a decade shows little variation in the number admitted to the several colleges, year by year. There are reasons to believe that the high quality likewise remains steady. The efforts of loyal alumni in this direction have been notable in the year just closing, as in past years.

E. F. BRADFORD,
Director of Admissions.

APPENDIX XVI

REPORT OF THE REGISTRAR

To the President of the University:

SIR: I have the honor to submit herewith my tenth annual report as Registrar of the University. The report covers the academic year 1939-40 including the Summer Session of 1939 and, for convenience, work between the end of the second term of 1938-39 and July 1, 1939 but excluding work between the end of the second term 1939-40 and July 1, 1940.

TABLE I
THE YEAR 1939-40

	Days in Session	Sun- days	Holi- days	Vaca- tion	Total
Summer Vacation, June 20-July 2				13	13
Summer Session, July 3-August 11	35	5			40
Summer Vacation, August 12-Sept. 24				44	44
First Term, September 25-February 7	102	16			118
Thanksgiving Vacation, Nov. 23-Nov. 26				4	4
Christmas Vacation, Dec. 21-Jan. 3				14	14
Midyear Recess, February 8				1	1
Spring Vacation, March 30-April 7				8½	8½
Spring Day, May 25			1		1
Second Term, February 9-June 17	103½	17			120½

TABLE II
ATTENDANCE FOR THE YEAR 1939-40

	Graduate	Class 1944	Class 1943	Class 1942	Class 1941	Class 1940	2 Yr. Spec. Agr.	Special	Total	Duplicates	Net Total
Agriculture	Men	2	374	267	290	255	250	22	1460		
	Women		49	59	45	27	2	9	191		
	Total	2	423	326	335	282	252	31	1651		
Architecture	Men	23	30	23	21	13			110		
	Women	7	9	4	4	5		1	30		
	Total	30	39	27	25	18		1	140		
Arts	Men	9	278	271	318	320		6	1202		
	Women		172	162	150	139		2	625		
	Total	9	450	433	468	459		8	1827		
Engineering	Men	105	386	348	232	191		2	1264		
	Women	1		2	1	1			5		
	Total	106	386	350	233	192		2	1269		
Graduates	Men	821							821		
	Women	179							179		
	Total	1000							1000		
Home	Men							1	1		
Economics	Women		116	117	126	109		10	478		
	Total		116	117	126	109		11	479		
Law	Men			91	56	52			199		
	Women			5	3	3			8		
	Total			96	56	55			207		
Medicine	Men		72	66	64	63		7	272		
	Women		6	4	6	8			24		
	Total		78	70	70	71		7	296		
Veterinary	Men		39	40	38	40			157		
	Women		1	2		4			7		
	Total		40	42	38	44			164		
Hotel	Men	3	90	84	77	53		4	311		
	Women		2	4	8	1			15		
	Total	3	92	88	85	54		4	326		
Total	Men	821	142	1269	1190	1096	250	42	5797	175	5622
	Women	179	8	355	359	340	297	22	1562	10	1552
	Total	1000	150	1624	1549	1436	252	64	7359	185	7174

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DISTRIBUTION OF DUPLICATES *

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Agriculture—Engineering	1		1
Agriculture—Veterinary	3	1	4
Architecture—Engineering	1		1
Arts—Agriculture	1		1
Arts—Architecture	2		2
Arts—Engineering	86		86
Arts—Hotel	2	1	3
Arts—Law	33	3	36
Arts—Medicine	12		12
Graduate School—Agriculture	5		5
Graduate School—Arts	6	3	9
Graduate School—Graduate School	60	22	82
Graduate School—Home Economics		1	1
Graduate School—Law	1	1	2
Graduate School—Medicine	1		1
Graduate School—Summer Session	406	233	639
Graduate School—Veterinary	1		1
Graduate School in Summer Session—Graduate School (Personal Direction)	12	2	14
Graduate School (Personal Direction)— Graduate School	105	10	115
Graduate School (Personal Direction)— Graduate School (Personal Direction)	3		3
Graduate School (Personal Direction)— Summer Session	2	1	3
Summer Session—Agriculture	34	10	44
Summer Session—Architecture	4	3	7
Summer Session—Arts	96	27	123
Summer Session—Engineering	156		156
Summer Session—Home Economics		14	14
Summer Session—Hotel	5		5
Summer Session—Law	2		2
Summer Session—Veterinary	2		2
Total	1042	332	1374

TABLE III

ATTENDANCE AT SUMMER SESSIONS, ETC., 1939-40

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Graduate, Personal Direction	128	29	157
Graduate, 1939 Summer Session	389	236	625
Summer Session, 1939	1181	881	2062
Short Winter Course, Agriculture, 1939-40	117	7	124
Extramural Course	27	68	95
Graduate, Candidates for Degree Only	28	8	36

TABLE IV

MATRICULATES

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Graduate	331	132	463
Advanced Standing	221	67	288
First Year	1241	327	1568
Special Students	18	12	30
2 Year Special Agriculture	112	2	114

* To accompany Table II, showing attendance for the year 1939-40.

Medicine (New York City)	51	7	58
Summer Session 1939	377	531	908
Summer Graduate (Personal Direction)	3	4	7
Duplicates	110	115	225
Net Totals	2244	967	3211

TABLE V

DEGREES

September 1939; February 1940; June 1940

	<i>Men</i>	<i>Women</i>	<i>Total</i>
A.B.	278	137	415
B.Chem.	26		26
B.S. (a)*	242	26	268
B.S. (b)		104	104
B.S. (c)	42	2	44
D.V.M.	39	4	43
B.Arch.	7	2	9
B.Fine Arts		3	3
B.L.A.	2		2
C.E.	29		29
B.C.E.	3		3
M.E.	39	1	40
B.M.E.	2		2
E.E.	17		17
B.S. in A.E.	55		55
Chem. Engr.	12		12
A.M.	45	34	79
A.M. in Education	2	2	4
M.Arch.	2		2
M.C.E.	6		6
M.M.E.	3		3
M.Fine Arts		1	1
M.S.	59	25	84
M.S. in Education	29	9	38
M.S. in Agriculture	17		17
M.S. in Engineering	18		18
LL.B.	52	3	55
LL.M.	1		1
Ph.D.	118	13	131
M.D.	62	8	70
Total	1207	374	1581
War Alumnus	1		1

* a, means Agriculture; b, Home Economics; c, Hotel Administration

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TABLE VI
TABLE SHOWING BY YEARS THE NUMBER AND KINDS OF DEGREES GRANTED BY
CORNELL UNIVERSITY

1936-1940 First Degrees							
	Before 1936	1936	1937	1938	1939	1940	Total
Bachelors of Arts.....	9992	388	347	362	384	415	11888
Bachelors of Chemistry.....	677	24	23	21	20	26	791
Bachelors of Literature.....	52						52
Bachelors of Philosophy.....	484						484
Bachelors of Letters.....	264						264
Bachelors of Science.....	3712						3712
Bachelors of Sci. in Chemistry.....	9						9
Bachelors of Sci. in Nat. Hist.....	4						4
Bachelors of Sci. in Agriculture.....	357						357
Bachelors of Sci. in Architecture.....	123						123
Bachelors of Architecture.....	659	25	19	16	17	9	745
Bachelors of Agriculture.....	30						30
Bachelors of the Sci. of Agr.....	127						127
Bachelors of Veterinary Science.....	4						4
Doctors of Veterinary Medicine.....	923	23	35	31	40	43	1095
Graduate in Pharmacy.....	1						1
Pharmaceutical Chemists.....	2						2
Bachelors of Civil Engineering.....	161					3	164
Civil Engineers.....	2870	44	30	22	38	29	3033
Bachelors of Mech. Engineering.....	57					2	59
Mechanical Engineers.....	6047	56	41	46	43	40	6223
Forest Engineers.....	17						17
Bachelors of Fine Arts.....	22	2	1	2	1	3	31
Electrical Engineers.....	687	30	21	19	24	17	798
Bachelors of Landscape Architecture.....	57	4	5	6	7	2	81
Bachelors of Science (College of Agr.).....	1615	202	177	237	254	268	2753
Bachelors of Science (College of Home Economics).....	820	111	106	89	87	104	1317
Bachelors of Science (Hotel Mgt.).....	266	29	30	43	49	44	461
Chemical Engineers.....	9	7	7	14	8	12	57
Bachelors of Science in Admin. Eng'g.....	69	42	53	55	35	55	309
Bachelors of Laws.....	2168	51	42	48	53	55	2417
Doctors of Medicine.....	1875	64	71	66	63	70	2209
Total First Degrees.....	34160	1102	1008	1077	1123	1197	39667
War Alumni.....	309		1	2		1	313
Advanced Degrees							
	Before 1936	1936	1937	1938	1939	1940	Total
Architects.....	1						1
Civil Engineers.....	20						20
Mechanical Engineers.....	1						1
Masters of Arts.....	1527	72	74	65	81	79	1898
Masters of Philosophy.....	10						10
Masters of Letters.....	9						9
Masters of Science.....	887	70	82	76	69	84	1268
Masters of Sci. in Agriculture.....	364	13	11	15	17	17	437
Masters of Sci. in Architecture.....	19						19
Masters of Chemical Engineering.....					2		2
Masters of Civil Engineering.....	227	16	16	16	11	6	292
Masters of Mechanical Engineering.....	261	3	2	4	3	3	276
Masters of Electrical Engineering.....	50		2	1	1		54
Masters of Laws.....	61	1		1		1	64
Masters of Landscape Design.....	21						21
Masters in Forestry.....	78	1	3	4			86
Masters of Architecture.....	37	3		1	1	2	44
Masters of Landscape Architecture.....	6			1	1		8
Masters of Fine Arts.....	4	1	1	1		1	8
Masters of Chemistry.....	15	3	3	2			23
Masters of Arts in Education.....	37	10	18	7	4	4	80
Masters of Science in Education.....	33	13	24	33	28	38	169
Masters of Science in Engineering.....	7	7	10	11	22	18	75
Doctors of Veterinary Medicine.....	1						1
Doctors of Science.....	20						20
Doctors of Philosophy.....	2137	124	124	131	130	131	2777
Doctors of Laws (Honorary).....	2						2
Doctors of the Science of Law.....	6		1				7
Total Advanced Degrees.....	5841	337	371	369	370	384	7672
Grand Total.....	40001	1439	1379	1446	1493	1581	47339

For previous years see previous reports.

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TABLE VII

TABLE SHOWING THE NUMBER OF STUDENTS IN EACH COURSE SINCE 1934-35

	1935-36	1936-37	1937-38	1938-39	1939-40
Agriculture.....	1257	1358	1513	1616	1651
Architecture.....	151	135	129	136	140
Arts.....	1825	1883	1980	1886	1827
Engineering.....	812	938	1025	1045	1269
Graduates.....	816	935	955	1050	1000
Home Economics.....	441	417	449	479	479
Hotel.....	209	254	271	291	326
Law.....	162	156	149	186	207
Medicine.....	290	299	289	288	296
Veterinary.....	131	151	154	163	164
Total excluding Duplicates.....	6019	6341	6684	7055	7174
Extramural Course.....	165	111	99	85	95
Graduate Work in Summer.....	723	828	836	784	782
Summer Session.....	1774	1924	1996	2057	2062
Winter Agriculture.....	128	123	96	126	124
Candidates for Degrees Only.....				35	36

TABLE VIII

AGE AT GRADUATION

The following table shows in years and months the age at graduation. For the age at graduation, taken at ten-year periods from 1870 to 1900, and at five-year periods from 1900 to 1930, see the Report of the Registrar, 1933-34.

	Class of 1935			Class of 1940		
	Minimum	Median	Maximum	Minimum	Median	Maximum
Agriculture						
Men.....	19-8	22-10	39-3	20-1	22-9	40-3
Women.....	20-7	21-11	26-8	19-10	21-8	31-2
Architecture						
Men.....	21-3	23-5	44-2	21-6	24-4	28-1
Women.....	22-5	23-3	24-1	21-4	23-5	24-9
Arts						
Men.....	18-11	21-8	28-1	19-2	21-10	33-3
Women.....	19-8	20-6	27-9	19-11	21-6	30-3
Engineering						
Men.....	20-	22-3	39-10	20-2	22-5	48-9
Women.....				25-8	25-8	25-8
Home Economics						
Men.....	21-5	22-7	25-9	20-	22-11	27-2
Women.....	19-2	22-1	36-4	19-7	22-	37-
Veterinary						
Men.....	20-9	23-4	61-8	20-6	24-	29-6
Women.....				21-7	22-6	25-1
Masters						
Men.....	20-7	27-7	72-5	21-1	27-9	55-10
Women.....	20-2	27-5	47-4	21-6	27-7	50-6
Doctors of Philosophy						
Men.....	24-	29-3	47-3	23-2	29-6	49-5
Women.....	20-7	27-2	46-10	24-9	34-11	45-8
Law						
Men.....	22-	24-5	27-2	21-11	24-4	29-2
Women.....				24-	25-2	26-7
Medicine						
Men.....	22-11	25-11	35-3	22-11	25-10	30-1
Women.....	24-3	26-6	36-9	24-3	26-3	43-5
War Alumnus						
Men.....				51-2	51-2	51-2

TABLE IX

With the aid of N. Y. A. student-workers, using averages computed for the year 1938-39, the following information was compiled on grading in some of the undergraduate colleges. (The average of each individual was weighted by the number of credit-hours in his program, as the mark in each subject was weighted by the number of credit-hours in that subject.)

A. DISTRIBUTION OF GRADE-HOURS, 1938-39

Grade-Group	Engineering	Architecture	Arts & Sciences	All Three
0-39	267 1.12%	13 .37%	446 .51%	726 .63%
40-59	2254 9.50%	148 4.31%	4634 5.30%	7036 6.14%
60-69	4726 19.92%	541 15.77%	16955 19.19%	22222 19.41%
70-79	7791 32.84%	1388 40.40%	28930 33.12%	38109 33.29%
80-89	6150 25.92%	934 27.23%	22562 25.84%	29646 25.90%
90-93	870 3.66%	125 3.64%	5831 6.67%	6826 5.96%
94-100	308 1.29%	35 1.02%	1539 1.76%	1882 1.64%
Inc.	409 1.72%	104 3.03%	1323 1.51%	1836 1.60%
Abs.	135 .56%	40 1.16%	742 .86%	917 .80%
Canc.	519 2.18%	72 2.09%	2721 3.11%	3312 2.89%
Z	293 1.23%	30 .87%	1627 1.86%	1950 1.70%
Total	23722 99.94%	3430 99.80%	87310 99.73%	114462 99.96%

B. COLLEGE AVERAGES, 1938-39

Architecture.....	72.64
Agriculture.....	75.46
Arts and Sciences.....	76.37
Chemical Engineering.....	77.19
Civil Engineering.....	72.62
Electrical Engineering.....	72.17
Home Economics.....	79.07
Hotel Administration.....	74.37
Law.....	76.08
Mechanical Engineering.....	74.00
Veterinary.....	76.99
All Men.....	74.48
All Women.....	77.81
All Fraternities.....	73.79
All Sororities.....	77.20
University.....	75.23

E. F. BRADFORD,
Registrar.

APPENDIX XVII

REPORT OF THE DIRECTOR OF THE
UNIVERSITY PLACEMENT BUREAU

To the President of the University:

SIR: I have the honor to present the report of the University Placement Bureau for the year 1939-40.

ALUMNI PLACEMENT

The alumni placement work continues to grow. This is reflected statistically in increased registration of alumni, more calls from employers, and more placements, all shown in Table I below. Some of this improvement is due to a general upturn in employment this year over last, but a good part of the change is due to the growing effectiveness of the placement work.

In addition to the alumni work done by the University Placement Bureau in Ithaca, the Cornell Club Employment Service in New York, under the management of Mr. P. O. Reyneau, '13, devotes its full time to that field. There are also seventeen alumni field placement secretaries at present, each appointed by his local club to serve its territory. The work of these volunteer placement secretaries, coordinated by the Bureau in Ithaca, is important in providing local contacts for Cornell alumni and employers. The University is indebted to each for his interest and help.

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TABLE I
ALUMNI PLACEMENT STATISTICS

<i>University Placement Bureau</i>	1940	1939	1938
Number of placements	33	25	15
Number of positions listed	400	356	211
Number of active registrants	568	515	370
*Number of inactive registrants	1368	1171	1077
<i>Employment Service of the Cornell Club of New York, N. Y.</i>			
Number of placements	55	50	60
Number of positions listed	320	240	240
Number of active registrants	410	460	480
Number of inactive registrants	1590	1350	1170

The problems involved in providing a satisfactory alumni placement service have not been solved, by any means. One of the most difficult is that having to do with the placement of men and women over forty-five years of age. Additional funds for travel and office assistance necessary to maintain a cordial working relationship with a wide variety of employers are desirable. Secretarial help for the Employment Service at the Cornell Club in New York is almost imperative. That office has never had the services of a clerk or stenographer. If such a person were provided, the manager's time could be used to much greater advantage.

SENIOR PLACEMENT

The Bureau has assembled data, from its own files and from the several college and department offices, concerning the placement of the 1940 class as of June 17, Commencement Day. A summary of this information is to be found in Table II. It is pleasing to note the improvement in employment this year over the last two. The figures were assembled before any students had left the campus. Many who had not definitely accepted jobs had one or more opportunities to do so and many others have developed such opportunities since leaving the campus. Only those who had definitely accepted employment have been included as employed in the table.

The principle function of the University Placement Bureau in the field of senior placement has been to coordinate and supplement the placement work of the various colleges which was going on at the time the central Bureau was created. Coordination is indicated in its senior placement work this year. Roughly one hundred companies actually visited the campus to interview students. Fifty-six of them corresponded with the Bureau previous to their visits and in about half the cases, the interviews were conducted at the Bureau's offices. The other half, after preliminary correspondence as to dates, records, etc., were directed to the college or department from which they wished to select students. The Bureau was in correspondence with over fifty other companies in search of men and sent records of seniors to thirty-two of them, some placements resulting.

Supplementing the former senior placement work of the University has meant, chiefly, providing placement service directly to students of the College of Arts and Sciences and to those of other colleges more interested in general commercial and business opportunities than in the fields of their major studies. Work with seniors in Liberal Arts has indicated that in the great majority of cases, students have not been prepared to choose their future occupations intelligently. More than half the class go on to graduate study each year. Most of those who do not, register with the Placement Bureau for work. It would seem entirely reasonable to equip this sizable group with some general information concerning the fields of work which may be open to them and to do so early enough in their college course so that any necessary adjustment of curriculum might be accomplished. The Placement Bureau has attempted to supply such information, and has done so successfully to a limited number of seniors, through bulletins, in-

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formal classes, and individual conference. But it is not able to reach all those who need it, nor to reach them soon enough.

TABLE II
EMPLOYMENT OF 1940 GRADUATES
PLACEMENTS REPORTED
TO THE BUREAU AND THE SEVERAL COLLEGES AND DEPARTMENTS
AS OF JUNE 17, 1940

College	Positions Reported June 17	Con- tinuing Studies	Total Class	Percent Unemployed or Not Reporting as of June 15		
				1940	1939	1938
<i>Agriculture:</i>						
Men	133	17	235	36	30	33
Women	6	3	24	62	84	82
<i>Architecture:</i>	6	1	14	50	69	50
<i>Arts & Sciences:</i>						
Men	52	162	267	21	36	37
Women	9	36	132	66	58	59
<i>Engineering:</i>						
B. S. in A. E.	42	0	51	17	39	49
C. E.	17	3	28	29	38	75
E. E.	11	1	16	25	32	44
M. E.	33	1	41	17	30	49
Chem. Eng.	10	0	12	8	0	8
<i>Home Economics:</i>	57	2	102	34	39	40
<i>Hotel:</i>	36	0	42	14	27	9
<i>Veterinary:</i>	35	0	42	19	27	23
Total	445	226	1007	33.6%	38%	41%

UNDERGRADUATE PLACEMENT

SUMMER PLACEMENT. There follow data on the Bureau's summer placement activity. Cornell's location, away from the large employing areas, has made it difficult for our students to search for their jobs or to report for preliminary interviews before the end of the spring term. As a result, placements have not been high in this field, although continued improvement is to be expected through development and enlargement of the present summer employer group.

TABLE III
SUMMER PLACEMENT DATA

		1940	1939	1938
<i>Placements Reported</i>		39	26	14
<i>Calls</i>				
For camp work		31	21	20
For other work		42	22	23
<i>Registrations</i>				
For camp work		145	145	132
For other work		332	258	212

TERM-TIME PLACEMENT. One thousand one hundred and thirty-one students, twenty-one per cent of the undergraduate enrollment, registered with the University Placement Bureau for part-time work of some kind. For this group there were available a relatively small number of jobs in fraternities, sororities, or private homes in exchange for meals or room, a large number of calls for work of a very temporary nature, such as substitute waiter or dishwasher, snow shoveling, cutting grass, etc., and N. Y. A. work.

*In addition, there are 1141 registrations of former seniors on file.

The Bureau filled seven hundred and forty-three requests from employers for student help during the year. It is not known just what the duration of the average job was. A number of calls for temporary work developed into lasting jobs. Clerical help was not available to follow up student placements and earnings with any accuracy. In addition, through the N. Y. A. Program, seven hundred and sixty-three students received work enough to earn close to fifteen dollars a month each. N. Y. A. earnings are shown in the following table.

TABLE IV
SUMMARY OF MONTHLY N. Y. A. PAYROLLS
1939-40

<i>Month</i>	<i>Number Students Aided</i>	<i>Payroll</i>
October	578	\$ 7,904.49
November	603	8,497.12
December	599	8,633.98
January	608	8,651.38
February	616	9,166.13
March	609	9,239.41
April	653	10,310.59
May	617	10,756.56
June	538	7,639.70
Total earnings		\$80,799.36
Total number of students aided		763
Average per student for nine months		\$105.90

Almost all of the \$80,800 which N. Y. A. students earned this year has gone to pay for some useful work in a University Department. The faculty in general has come to have a high regard for the N. Y. A. Program and to feel that the help provided them through these funds is, in many cases, indispensable to the proper functioning of their departments. The N. Y. A. student has made a real place for himself as a part-time worker for the University, which suggests the possibility of providing University or scholarship supported work assignments as a regular form of student aid.

The city of Ithaca offers relatively few opportunities for the self-supporting student, as would be expected in a community of its size and character. Practically all student work is obtained in the University or University community. In spite of this, there are between five and seven hundred steady jobs over which the University has no control. Most of these jobs are in fraternities or sororities. Others are in the Student Agencies, local restaurants and cafeterias, and with private families. Within the University, student hiring is so decentralized that literally no one knows how many are employed or where. In this situation, the Placement Bureau's problem has been to gain the support and cooperation of these many student employer groups in order to provide a market for the students who seek its help. It has encouraged the Student Agencies in every possible way, stimulating the development of a Novelty Agency which catered to the football crowds successfully, and in general broadening the opportunities for students with the various Agencies.

Some centralized control over student employment seems desirable though difficult of attainment. Only through such control can student work be coordinated properly with loans and scholarships to provide the tools with which to solve the student's financial problems to best advantage.

The Bureau has been actively interested in legislation affecting the status of the student worker. Efforts to get the Unemployment Insurance Law amended were successful so that student workers in fraternities and sororities are now exempted from its provisions. At the present time, the Bureau is cooperating in an effort to secure exemptions for students under the Minimum Wage and Hour Board codes for restaurants and hotels, permitting them to continue to earn their meals in exchange for work.

It is worthy of note that two student cooperative dining rooms, feeding about 280 men at low cost, have been in operation for some time near the campus. A second cooperative house providing living quarters was opened during the year.

HERBERT H. WILLIAMS,
Director of the University Placement Bureau.

APPENDIX XVIII

REPORT OF THE DIRECTOR OF PHYSICAL EDUCATION AND ATHLETICS

To the President of the University:

SIR: Once again it is my pleasure to submit the annual report of the Department of Physical Education and Athletics.

The year 1939-40 has been a most satisfactory one for all Cornell intercollegiate athletic teams. Moreover, to add to the flavor, and as welcome perquisites, baseball, cross country, football, and rowing each emerged with a championship, either real, or mythical. Our coaching staff has proven itself eminently qualified and psychologically able to teach the technical requirements and to place on the fields of play well-drilled, properly conditioned Cornell teams.

During the past year there have been some changes in the physical make-up of the athletic plant, notable among which are the new stone entrance gates and stone ticket booths at Schoellkopf and a new shelter house for rowing on the east shore of Cayuga Lake. The former have contributed greatly to the general appearance of the plant. The addition of the latter made it possible to conduct one of the most satisfactory Spring Day crew regattas ever held in Ithaca.

Directed by a desire to sponsor carry-over sports, and prompted by the general enthusiasm for golf, this department provided \$25,000 from the 1938-39 receipts of the Athletic Division to construct a nine-hole golf course. Since that time, we have allocated \$14,300 additional for the purchase of materials and to provide proper maintenance of the course until it is opened next spring. From all indications, a nine-hole course will be entirely inadequate to meet the apparent needs of all interested.

Our outdoor facilities, however strained, are disproportionately ample compared with our deficient indoor recreational circumstances. The records show that an unusually high percentage of our male students participate in intramural athletics. During the winter months when such activities have an especial health value, facilities are so lacking as to render it impossible to carry on anything approaching an adequate program.

Physical fitness has a significant connotation in these days of world crisis. There is much talk of American youth becoming flaccid. It is our task to provide every means of preparing our charges here at Cornell for any emergency requiring physical fitness. To this end, we are inaugurating next fall the first organized physical training and corrective exercise classes for Cornell men. All boys excused from military training because of physical disabilities, will be required to take this course. All others are welcome. Classes will be conducted and supervised by members of our coaching staff. Again, our utter lack of sufficient gymnasium equipment makes this venture considerably more difficult.

The program started four years ago to rehabilitate a plant that had been allowed to reach a deplorable condition, the sums allocated to the golf course, and other construction projects have precluded payment of any substantial amounts toward reducing our indebtedness to the University. We now feel, however, that our present plant is in good condition, requiring little more than proper maintenance for some time to come. Thus, we are hopeful that the future will see a gradual reduction in our indebtedness, leveling off this burden to a degree which will enable us to accomplish more comprehensive recreational achievements, as always in the best interests of the University.

JAMES LYNNAH,
Director of Physical Education and Athletics.

APPENDIX XIX

REPORT OF THE CHAIRMAN OF THE DEPARTMENT
OF HYGIENE

To the President of the University:

SIR: I have the honor to present the report of the Department of Hygiene and Preventive Medicine for the year 1939-40.

STUDENT ILLNESSES

The year has been remarkable for the comparative absence of the communicable diseases. In the student body of 6,657 persons there occurred during the year only 40 cases of infectious mononucleosis, 21 cases of acute interstitial pneumonitis, 4 cases of pneumonia, 3 cases of german measles, 2 cases of chicken-pox, and 2 cases of scarlet fever. Though there were 666 cases of common cold with fever there was no epidemic of grippe or influenza.

Students made 23,539 calls at the office of the men's medical adviser, 5,984 calls at the women's medical office. There were 208 operations performed at the Infirmary; 94 of these being minor surgery, 56 being treatments of fractures and dislocations, 37 appendectomies, 21 tonsillectomies. Four deaths occurred, one due to an idiosyncrasy to a drug in use for the treatment of Vincent's gingivitis, one due to suicide, one due to a head injury suffered in an automobile accident, and one due to streptococcus viridans meningitis.

MENTAL HYGIENE

The work of our mental hygienists, Dr. Douglas Darling and Dr. Ruth Stelle is summarized as follows:

	<i>c/o Dr. Darling</i>	<i>c/o Dr. Stelle</i>
No. of psychogenic cases seen.....	111	79
	(91 new—20 old)	(56 new—23 old)
Patients hospitalized in the Infirmary.....	19	
Patients requiring leave of absence.....	9	3
Patients who failed or were dropped for scholastic reasons	4	

Dr. Darling has classified the nature of the psychogenic problems in his 111 cases as follows:

	<i>New</i>	<i>Old</i>
1. Problems of organic disease.....	5	
2. Economic problems	2	
3. Academic and vocational problems.....	6	I
4. Problems of interpersonality relations.....	27	8
A. Family	(2)	(2)
B. Sexual	(17)	(6)
C. Social and racial.....	(4)	
5. Problems of internal personality organization.....	42	II
A. Psychoneurotic structure	(18)	(4)
B. Cyclothymic structure	(1)	(1)
C. Pre-schizoid personality structure.....	(2)	
D. Schizoid personality structure.....	(5)	(1)
E. Schizophrenia	(2)	(1)
F. Psychopathic personality.....	(1)	
G. Atypical structure	(13)	(4)
6. No or unknown psychiatric problem.....	9	

Dr. Stelle has classified her cases as follows:

Nervous overactivity and neurotic traits.....	10
Emotional maladjustment, general.....	22

Emotional maladjustment, simple situational.....	11
Psychoneuroses	33
Schizophrenia	3

Dr. Stelle reports that 27 of her 79 cases with psychogenic problems were found in the entering class and only 10 in the senior class.

There were 166 students registered in the mental hygiene courses during the year.

THE CARDIAC PROGRAM

Dr. Cuykendall gave special cardiac examinations to 169 persons most of whom had been referred to her as possible cardiac cases by the staff physicians.

Amongst the members of the freshman and senior classes the following cardiac cases were found.

	Class of 1943		Class of 1940	
	Men	Women	Men	Women
Organic heart disease	12	13	11	5
Congenital	(1)	(1)	(1)	
Rheumatic	(11)	(12)	(10)	(5)
Hypertension	68	3	33	0

The incidence of organic heart disease in these classes was as follows:

Class of 1943	men 1 %	women 3.9%
Class of 1940	men 1.3%	women 1.8%

COMBATING TUBERCULOSIS

	Men	Women	Total
Number of students tuberculin tested.....	201	200	401
Number of positive reactors found.....	51	57	108
Percentage of those tested found to be positive reactors	25.3%	28.5%	26.6%
Cases diagnosed as clinically active tuberculosis	1	1	2
Cases diagnosed as clinically inactive tuberculosis....	10		10
Total of new cases found.....	11	1	12
Cases previously diagnosed, returned to college.....	10		10
Newly found cases, allowed to stay.....	10		10
Total cases under observation at Cornell...	20		20
Withdrawals from college because of tuberculosis....	1	1	2

Of the 20 cases of clinical tuberculosis under the observation of Dr. Showacre and Dr. Evans only two had to give up their work and seek sanitarium care during the year.

Due to the generosity of Mr. John H. Mayer 39 students who reacted positively to tuberculin received chest radiographs which they could otherwise not have afforded.

SOCIAL HYGIENE

Though the Wassermann test was offered to all those who desired it only 102 asked that it be done. Among these no positive reactions occurred. Departmental records show no cases of syphilis, 5 cases of gonorrheal urethritis, and 1 case of gonorrheal rheumatism.

THE SKIN CLINIC

Dr. Gould reported 2,381 special consultations regarding skin conditions or diseases among 276 students.

The commonest skin conditions found were:

Warts	49 cases
Fungus infections	46 "
Severe acne	29 "
Impetigo	24 "
Eczema	17 "
Boils	15 "
Acute dermatitis	15 "

ORTHOPEDIC CASES

Dr. Deyoe reported having seen 126 orthopedic cases. He cooperated with the Department of Physical Education in providing corrective exercises for 59 of such cases.

THE CARE OF ATHLETES

All candidates for intercollegiate athletic teams were examined by members of our staff. All injuries sustained in athletics were seen by our staff members. The following table summarizes this work.

	<i>No. examined for this sport only</i>	<i>No. examined for this sport and others</i>	<i>Total Number Examined</i>	<i>Number Rejected</i>	<i>Number Injured</i>
Baseball	83	55	138		7
Basketball	52	32	84		6
Boxing	50	28	78		7
Crew	263	48	312	1	10
Fencing	35	13	48		1
Football:	204	92	298	2	112
Varsity					(45)
Freshman					(42)
Spring					(11)
150 Pound					(14)
Golf	12	7	19		
Hockey	17	20	37		4
Lacrosse	32	26	58		16
Polo	48	11	60	1	2
Soccer	67	28	96	1	10
Swimming	36	19	55		
Track	172	68	241	1	19
Tennis	33	13	46		
Wrestling	76	30	107	1	38
Intramurals, Rugby and Winter Sports....	19	15	34		3
Touch Football					90
Totals			1711	7	325

In caring for the athletic injuries, Dr. Britton gave 2,201 treatments and found it necessary to call in consultants outside the department as follows:

Surgical consultations in 20 cases

X-ray consultations in 10 cases

Dental consultations in 8 cases

Eye, ear, nose, and throat consultations in 7 cases

Of the 10 cerebral concussions seen during the year, football contributed 6, lacrosse 2, and wrestling 2. Of the 25 fractures seen, football contributed 10, wrestling 6, boxing 3. Of the 15 dislocations, football contributed 3, and wrestling 3.

Among the intramural sports, touch-football was the most dangerous, providing 1 cerebral concussion, 7 fractures, 8 dislocations and 1 "internal injuries." The toboggan provided 21 injuries, 7 of which were fractured vertebrae. It is hoped that the new regulations recently set up for the operation of the toboggan will result in a marked reduction in these figures for next year.

HEALTH EXAMINATIONS

Examinations, men:

Class of 1943.....	1230
Class of 1940.....	746

Entering Graduate Students and others.....	1237	3,213
Examinations, <i>women</i> :		
Class of 1943.....	334	
Class of 1940.....	279	
Entering Graduate Students and others.....	149	762
Total		3,975

THE INCIDENCE OF UNREMEDIED PHYSICAL DEFECTS (MEN)

	1034 Men, Class of '40 as Freshmen	746 Men, Class of '40 as Seniors
Defects needing special care of surgeon.....	70	13
Defects needing ear, nose, and throat specialist.	43	44
Defects needing special care of dentist.....	53	36
Defects needing special care of oculist.....	65	60
Defects needing special care of orthopedist.....	211	68
	442 (42.7%)	221 (29.4%)

INCIDENCE OF FAULTY HEALTH HABITS (MEN)

	Class of '40 as Freshmen	Class of '40 as Seniors
Faults in important health habits.....	266—(25.7%)	458—(61.3%)
Failure to obtain prescribed amount of exercise	95—(11.3%)	129—(17.3%)
Failure to obtain 8 hours a night of sleep.....	79—(9.9%)	124—(16.6%)
Using more than the equivalent of 10 cigarettes daily	76—(9.5%)	169—(22.7%)
Drinking more than two cups of coffee or tea daily	13—(1.6%)	35—(4.7%)

From the figures above it is evident that over one-quarter of Cornell students do not obtain correction of their physical defects while they are in the University and that faulty health habits increase rather than decrease in number during student life. The need for hygiene instruction, for follow-up of students with remediable defects, and for special provision for financing the correction of defects is obvious.

FOLLOW-UP CONFERENCES

Though time did not permit the routine examining of all sophomores and juniors, the records of both of these classes were reviewed during the second term and all students with remediable defects still unremedied were called in for a follow-up conference.

Follow-up studies were made on 129 cases of albuminuria, and 12 cases of glycosuria. There were no cases of nephritis and but 1 case of diabetes found.

CLASSROOM TEACHING

1513 students registered for Hygiene I, all but 73 completing it successfully.

1448 students registered for Hygiene II, all but 119 completing it successfully.

338 students registered for elective courses, all but 26 completing them successfully.

The University requirement was waived because of work completed elsewhere in 13 cases for Hygiene I, in 11 cases for Hygiene II.

43 students petitioned to take the comprehensive examination in Hygiene I, 30 took this examination, 2 passed it.

42 students petitioned to take the comprehensive examination in Hygiene II, 26 took this examination, 13 passed it.

As an experiment this year the community hygiene (formerly Hygiene II)

PRESIDENT'S REPORT

was integrated with the personal hygiene (formerly Hygiene I) and a greater emphasis given to the personal hygiene throughout the year. The results were so favorable that the experiment will be continued the coming year.

COOPERATIVE ACTIVITIES

Our staff contributed to the work of other departments of the University as follows:

1. Examined 113 women food handlers, 23 women employees. Examined 95 men food handlers, 245 men employees, and gave 635 treatments to 179 injured employees.
2. Examined and immunized 150 students against typhoid fever for the Department of Military Science.
3. Rejected upon the basis of physical examination 136 students from the basic course in Military Science.
4. Examined 32 students in contact with Nursery School children.
5. Made and interpreted 2,108 radiographs, 99 electrocardiograms, 8,927 clinical laboratory tests including 76 basal metabolism tests.
6. Supervised the isolation of 12 cases of communicable disease at the Infirmary.
7. Reviewed the medical records of 540 students whose scholastic standing was in question and sent notes to the college deans covering those cases when illness was a significant factor in accounting for poor scholastic work.
8. Vaccinated against smallpox 102 students preliminary to entrance in the University.
9. Supervised the sanitation of the swimming pools in the men's and women's gymnasiums.
10. Prescribed special exercises for 59 orthopedic cases who are required to take corrective physical education rather than the regularly prescribed course.
11. Treated 11 visiting athletes from other institutions who received injuries in sports here at Cornell.

NEEDS FOR THE FUTURE

The Board of Trustees, acting upon the report of its special committee, has already authorized for next year (1) a \$3 increase in the Health and Infirmary fee (bringing it to \$15 a year), (2) the organization of a University Clinic on the campus in the McMahon house (3) the appointment of a Clinical Director and Physician-in-Chief to the Infirmary and Clinic, (4) the appointment of three residents at the Infirmary who will provide general medical treatment under the direction of the Physician-in-Chief.

It is hoped that the setting up of these additional treatment facilities will not emphasize treatment at the expense of our preventive and health educational efforts, but will make all three phases of the program more complete, better controlled, and more systematic.

In this expansion of the student health service work the need for a new Health Service Building becomes even more obvious, and it is hoped that funds may be found for erecting a building on the campus to provide for bedside medical care, ambulatory medical care, medical examining, and health teaching.

D. F. SMILEY,
Professor of Hygiene and Medical Adviser.

APPENDIX XX

REPORT OF THE DIRECTOR OF MILITARY TRAINING

To the President of the University:

SIR: I have the honor to submit this report of the Department of Military Science and Tactics for the academic year 1939-40.

EXTRA-CURRICULAR ACTIVITIES

It is desired this year to depart somewhat from the usual report submitted by this department to emphasize particularly the program of extra-curricular activities which is carried out each year. These activities place a heavy extra burden on the officers of the department, but the benefits accruing to the University amply justify the present program. The officers, without exception, conscientiously and efficiently performed these duties in the same spirit of loyalty and to the best interest of the University as they do in all other required duties.

Of the sports managed by the Military Department, polo, a University minor sport, entails the greatest amount of extra work both by officers and by the enlisted men of the detachment, the season covering practically the entire college year. The instruction and practice are held five days in the week from 4:30 to 6:30 P. M. The squad, composed of the Varsity squad averaging 17 men and the Freshman squad averaging 25 men, require the services of two officers as coaches. They were this year Major F. A. Metcalf and Captain G. B. Coverdale. Considering the amount of time devoted each week, the number of students participating, and the fact that the season covers almost the entire college year, the value of the sport is apparent. The Varsity played 17 games during the season, 10 of them away from Ithaca, and the Freshmen 3 games. Because of the fact that the team this year was composed of men with relatively little previous experience, the showing was not as good as usual.

In order to use to the maximum the facilities available for instruction in horsemanship, the department conducted special classes in equitation in addition to the course prescribed for Basic Field Artillery students. One class was held for selected men students and one class for selected girl students. Each class was held twice a week. The girls' class assisted the Department of Physical Education in their program for girl students during the spring term. The Girls' Riding Class, under Captain E. H. Lastayo, was composed of thirty girls, vacancies in the class being filled after elimination tests of all Freshman applicants. Instruction in all these classes was pointed toward participation in the Annual Cornell R. O. T. C. Horse Show.

The 20th Annual Horse Show, held on the evenings of April 26 and 27, was designed to stimulate interest in performance among the students in the equitation classes in the R. O. T. C. as a whole, and on the campus and in the community in general. In addition, it was designed so as to bring to Cornell outside horses and horsemen, in the belief that opening the show to outside entries creates a certain amount of good will toward the University. An innovation this year was special classes in judging, with the co-operation of the Department of Animal Husbandry. It is believed that the show was fully as successful as in years past. Although the time and labor required of the officers and men of the department in preparing for and conducting the show are considerable, the interest shown both by the students and by the community indicates that the effort is warranted.

Other sports managed by the department are the rifle and pistol teams. The rifle team, coached this year by Major J. F. Farnsworth, is recognized by the Cornell University Athletic Association as a minor sport. The season runs from October to mid-April. In addition to the regular practice for the Varsity and Freshman squads, a small arms firing school was conducted during the winter and was opened to all Freshmen in the R. O. T. C. About 75 students took advantage of the instruction. The rifle team had an unusually successful season, winning all the dual matches, winning the Second Corps Area Intercolle-

giate Meet and placing second in the National Intercollegiate Postal Meet. This is the highest place ever won by Cornell in the last mentioned meet. The pistol team, coached by Captain R. T. Finn, although not recognized by the University as a minor sport, entails about as much time and effort as the rifle team. In addition to the regular coaching of the Varsity and Freshmen squads, Captain Finn conducted a school in pistol firing for Freshmen which was attended by about 80 students.

The department has continued to do its share in the social life of the campus. Officers of the department have acted as Faculty Advisers for the Cornell Officers' Club, a social organization for the Advanced Course R. O. T. C. students; for Scabbard and Blade, a national military society; for Pi Tau Pi Sigma, a national honorary Signal Corps society; for the Clef Club, a selected club for upperclassmen of the Band; and for the Pershing Rifles, a national military organization. These societies combined to put on a military ball and carnival early in the spring in Barton Hall which was opened to all students in the University in place of the old military ball, admittance to which was limited. The success of this new venture justified the belief that this affair will eventually become one of the most popular on the campus. The major social activity of the department, however, was the Annual Navy (Spring Day) Ball held as in years past for the sole purpose of raising funds for the Band. The proceeds from this ball are the sole source of funds to cover all expenses of the Band including the cost of their trips away from the University each year with the University football teams. This ball is one of the two largest social functions on the campus each year. A ball of the proportions of the Navy Ball requires a vast amount of planning and supervision. This is done by the Adjutant, this year Major W. R. Slaughter, who was assisted by students from the R. O. T. C. and from the University at large. Although the Ball and the Band are under the immediate supervision of the Military Department, they are conducted for the benefit of the University as a whole, particularly the Athletic Department. Consequently participation outside of the R. O. T. C. is encouraged. The net proceeds this year for the Band Fund were approximately \$5,500 which is about the average for past years but considerably larger than that for last year.

The Cornell R. O. T. C. Band under the immediate supervision this year of Major H. D. Gibson and directed by Mr. G. L. Coleman, is one of the most important extra-curricular activities of the department. Actually there are two bands, the Cadet Band composed of underclassmen who are permitted to take Band in lieu of basic R. O. T. C. training, and the Varsity Band composed largely of upperclassmen. There are approximately 80 Freshmen and 44 Sophomores enrolled in the cadet Band and approximately 51 upperclassmen in the Varsity Band. For practical purposes, however, there is little distinction between the two bands, the Cadet Band acting as a feeder for the Varsity and most of the Sophomores and a few of the Freshmen playing in both bands. The band work is particularly arduous during the football season, as it is necessary to hold practice and drill almost daily. Thereafter two or three sessions each week are required. This year, and in recent years, the excellence of the Cornell Band has won it such wide and favorable recognition that today it is almost an essential adjunct of the football team and of the University. Only by consistent hard work by the department and by the students can it be maintained in its present high standard of attainment.

ENROLLMENT 1939-40

UNIT	Enrolled in Fall				Completed in Spring			
	Basic	Advanced			Basic	Advanced		
	1st Year	2nd Year	1st Year	2nd Year	1st Year	2nd Year	1st Year	2nd Year
Infantry	300	213	49	34	241	174	47	33
Field Artillery. . .	645	488	84	56	563	376	72	52
Ordnance			22	18			22	17
Signal Corps . . .	75	67	10	12	63	56	10	11

MILITARY TRAINING

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Band	90	62		80	44		
Total	1110	830	165	120	947	650	151 113
Total Enrolled						2225	
Total Completed						1861	

Advanced Course students are required to attend a summer camp of six weeks, normally between the junior and senior years. During the summer of 1939, Cornell students attended these camps as follows:

Infantry (Plattsburg Barracks, N. Y.)	33
Field Artillery (Madison Barracks, N. Y.)	54
Ordnance (Aberdeen Proving Ground, Md.)	22
Signal Corps (Fort Monmouth, N. J.)	7

One hundred eleven commissions as Second Lieutenants, Reserve Corps (or Certificates of Eligibility for those under twenty-one years of age) were conferred on students completing the Advanced Course during the academic year 1939-40, distributed as follows:

Infantry	32
Field Artillery	51
Ordnance	17
Signal Corps	11

(Four Field Artillery and one Infantry of the above figures received commissions in the Quartermaster Corps.)

CURRICULA

Certain minor changes have been made in the curricula of the R. O. T. C. by the War Department during the past year, designed to increase its general value to the student both in the practical work and in the standard of scholarship required in the theoretical work. The ratio of theoretical to practical work remains approximately the same, that is 2 to 1 for the Basic Course and 4 to 1 for the Advanced Course. The attitude of the students during attendance at Military Science has continued excellent. This was particularly noticeable in their endeavor this year to make a fine showing at the President's Review when the annual War Department inspectors also were present. All four units were again rated Excellent this year as a result of the War Department inspection. This is the highest rating authorized. The change of the name of the building of the department from "Drill Hall" to "Barton Hall", authorized by the Board of Trustees during the winter, has already has a most satisfactory psychological effect in overcoming a widespread belief that the instruction of Military Science and Tactics consisted largely of mere drill. A certain amount of practical work is necessary but this is used mainly for the purpose of teaching leadership.

FACILITIES

Steady progress has been made during the year in continuing the improvement and upkeep of the facilities of the Military Department in proportion to the limited funds available. This includes Barton Hall, the Stables, and the Riding Hall. The Department of Buildings and Grounds has completed arrangements for improving the preservation and care of the main floor of Barton Hall.

FACULTY AND STAFF

Changes in Army commissioned personnel at the beginning of the Fall term were:

Major Walter L. Mitchell, Inf., vice Lt. Colonel James I. Muir, Inf.
 Major Jesse B. Matlack, F.A., vice Major Charles E. Boyle, F.A.
 Major Benjamin W. Venable, Inf., vice Major James O. Tarbox, Inf.
 Captain Edward H. Lastayo, F.A., vice Captain George M. Williamson, F.A.

Captain Garrison B. Coverdale, F.A., vice Captain Leslie B. Downing, F.A.
Captain Russell T. Finn, F.A., vice Captain John R. Pitman, F.A.

The total faculty and staff personnel consists of fourteen officers and twenty-eight enlisted men of the Army.

W. C. POTTER,

Colonel, Field Artillery, and Professor of Military Science and Tactics.

APPENDIX XXI

REPORT OF THE DIRECTOR OF EXTRAMURAL COURSES

To the President of the University:

SIR: I have the honor to submit a report on the work of the Extramural Courses for the year 1939-40.

Instructional centers for the Extramural Courses have been maintained during the past year at Cortland, Ithaca Memorial Hospital, Montour Falls, Ovid, and Rochester.

The fees collected from students enrolled in these courses have been sufficient to pay for all instructional stipends, travel expense connected with the instructional service, and office expense, with a net balance of \$388.79.

Since most students interested in courses of this nature are teachers actively in service in the public schools, any reduction in teachers' salaries tends to be reflected in fewer teachers taking advantage of such offerings. This has been the case during the past two years although a few more students were enrolled this year than last. Reduction in state aid for schools is reflected here as it has been in comparable areas.

A notable project this year has been the maintenance of a course in Curriculum Construction in Industrial Schools at Rochester. This course was offered by Dr. L. A. Emerson, professor of industrial education. This is an area in public education which is expanding rapidly at the present time and by its nature it requires the type of service in the professional improvement of teaching which can best be given through extramural courses. Professor Emerson, in a memorandum (Sept. 17, 1939), described the needs as follows:

The Board of Education of Rochester is opening up this fall a new vocational school designed primarily for boys of retarded school level who are to be trained for the semi-skilled occupations. As this is a relatively new field of vocational education, the Associate Superintendent, Mr. Bird, is anxious that the faculty of this school have an opportunity to study the problem of curriculum construction with particular reference to the type of program to be offered there. Mr. Fink, of the State Department of Education, is also interested in the possibilities of such work on the part of the faculty. It has been proposed that I offer an extramural course for this group, covering the general problems of curriculum building for vocational schools applied particularly to the program of this new school. The faculty is ready to undertake such a course, with the plan of offering a two-hour unit to run through the school year, with the class meeting every other week. The proposed content of the course is similar to that offered in the summer sessions to technical teachers, but is somewhat broader and will include a study of the school as a whole rather than being limited to related work only.

The course in English Composition given for public health nurses has permitted a group of aspiring professional workers to add to their competence and at the same time to make some advancement toward meeting the state requirements for higher classification.

Courses in the other centers were given primarily for public school teachers. The work in educational psychology was articulated with actual classroom prob-

lems as they emerged from day to day in school procedures. In an Extramural Course there are exceptional opportunities to join a consideration of a systematic treatment of a field with the actual application of principles to methods and procedures in the classroom.

The courses in Elementary School Science and Nature Study continue to be in demand since they can, for the most part, be given more effectively off campus than within university classrooms. In addition to classroom lectures and exercises, classes of teachers are taken into the fields to study at first hand. Numerous units of interest of this nature become in turn centers of interest for the children whose teachers are enrolled in these classes. These become a part of the school programs in the schools much to the delight and satisfaction of all concerned.

Our Extramural Courses have been established along very conservative lines as to offerings, and only regular members of the residence staff may offer them. If this policy were somewhat liberalized it seems probable that the work could be extended.

There have come requests for the establishment of larger centers in which a number of more or less standardized courses for freshmen and sophomores might be offered. In short, it has been suggested that what might be the equivalent of a junior college might well be considered. This is beyond the scope of our offerings as the work is now organized and seems to raise a question of general university policy. The Binghamton area might well become such a center should such a step appear to be desirable. This is a population center of considerable size and at present there is no local institution of higher learning to provide such services. I believe it is unique among up-state communities in this respect as all other communities of this magnitude have at hand some local institution of higher learning.

It is not improbable that the present emergency of national defence may give rise to new requests for off-campus services and the existence of the organization for Extramural Courses will permit of some response without delay or special legislation.

CLYDE B. MOORE,
Director of Extramural Courses.

APPENDIX XXII

REPORT OF THE LIBRARIAN

To the President of the University:

SIR: I have the honor to submit the report of the Librarian of the University Library for the year ended June 30, 1940.

If the growth of libraries and the expansion of library service may be taken as a measure of the cultural progress and as a gauge of the intellectual and educational level of a nation, the people of the United States may be justly proud of the records of the current century in this field. Mere numbers, to be sure, are not the sole criterion of excellence; yet it is not without significance that not many years ago our national library, the Library of Congress, which now (June 1939) numbers 8,470,744 books, pamphlets, pieces of music, maps and views, exceeded the world's hitherto largest libraries, the Bibliothèque Nationale in Paris and the Library of the British Museum in London. For many years the libraries of Harvard University (4,079,541 items, June 1930) have far outdistanced any single European university.

The share of Cornell University in this phase of American expansion has not been insignificant. The total for libraries on the campus is now 1,063,203 items. It is true that for several decades after the beginning of the century, and particularly during the universal decline that followed the World War, the libraries

of Cornell University did not succeed in holding their own with a number of other university libraries. This did not mean that Cornell libraries ceased to grow, but that others, especially a number of Western and Midwestern state-subsidized university libraries, grew and continue to grow more rapidly. In recent years, however, there has been a noticeable change in this respect. The following table will give a rough idea of the fluctuations in growth of the general University Library at Cornell.

BOOKS ADDED

1899-1900.....	14,128	1924-1925.....	13,708
1904-1905 (Fiske gifts)	25,676	1929-1930.....	13,117
1909-1910.....	11,005	1934-1935.....	10,826
1914-1915.....	12,627	1938-1939.....	15,684
1919-1920 (Wason gift)	22,414	1939-1940.....	16,359

The income from library endowment funds has not yet recovered from the decline which followed the depression of the early thirties. As early as 1936-37 increased appropriations by the Trustees from the University's general funds helped to counteract the shortage in library endowment income. There were further increases in the following years. In addition to these the University Library was fortunate in each of the years 1938-39 and 1939-40 to receive a special grant of \$5,000 from the President's Surplus Fund. These windfalls did much to relieve the growing feeling of despair on the Campus at the apparent retrogression in library development. May they be a happy omen for a not too distant future, which will see the Library restored to a position commensurate with the growth and expansion of the University as a whole. In this connection the Librarian ventures to renew his recommendation that the consideration of a possible addition to the present building (if a new building cannot be obtained) be not deferred until congestion begins to work havoc in the orderly handling and shelving of our books.

The total number of books added to the University Library in 1939-40 was 16,359 as against 15,684 in 1938-39. This has placed a severe strain upon an Accessions, Classification, and Cataloguing staff, which was inadequate even before the recent acceleration in growth began. This, together with the antiquated equipment and the crowded quarters in which their work has to be done, out of sight of the public eye, prompts the Librarian to offer a word of grateful commendation to all those who have given their best efforts under trying circumstances. From the disadvantage of working under unfavorable crowded conditions the Librarian himself was freed by the generous action of the President, when the Librarian's old quarters were exchanged for a newly appointed, well-lighted, commodious office with an ante-room for the Librarian's Secretary, secured by remodelling the large room on the mezzanine floor of the library building, formerly used by the Sage School of Philosophy. Comparatively little space was gained for the expansion of cataloguing activities, but the installation of a new and adequate system of indirect lighting has made a marked difference in working conditions in the Catalogue Room.

The Library Council (now officially designated the Library Board), which was reorganized in 1938, held five meetings during the past year. It continued its deliberations on the survey of the campus book situation made by its special assistant, Mr. William H. Hyde, jr. The discussions culminated in a plan for a readjustment of the book fund allotment scheme of the University Library.

During the early part of the past year Mr. Hyde continued his work of revising the figures for the general survey of the use of book funds on the whole campus and also catalogued all books of the Library of the College of Architecture which had not been represented in the union catalogue in the University Library building. For several months Mr. Hyde was loaned to the Dean of the College of Engineering to assist in the reorganization of the united libraries of the Schools of Mechanical and of Electrical Engineering. In February 1940 Mr. Hyde was released from his duties with the Library Board and was appointed Librarian of the Mechanical and Electrical Engineering Library.

LIBRARIAN'S REPORT

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ACCESSIONS

The total amount expended for books, periodicals, and bindings was \$37,028. The total number of items added to the University Library was 16,359, of which 10,878 were for the general library, the remainder going to special collections. For the general library 6,414 were purchased and 4,464 were received as gifts.

Miss Ingersoll, Head of the Accessions Division, reports the following figures:

	<i>Items added</i>	<i>Present extent</i>
General Library.....	10,878	704,010
Dante Collection	62	10,874
Petrarch Collection	9	4,569
Icelandic Collection	252	21,674
Wason Chinese Collection	2,121	29,764*
Wordsworth Collection (Gift of Mr. Victor Emanuel)	24	2,646
Cornell University theses	700	14,446
Philological Seminary	8	1,169
Sage School of Philosophy.....	—	1,002
German Seminary	—	759
French Seminary	—	24
Latin Seminary	—	326
American History Seminary	—	672
Manuscripts	10	976
Maps	11	1,189
Cornell University maps and plans	—	202
U. S. Coast Survey charts	—	950
U. S. Geological Survey atlases.....	—	216
U. S. Geological Survey topographical sheets.....	808	4,917
British Geological Survey maps.....	—	600
College of Architecture Library.....	604	3,784
Barnes Hall Library.....	69	3,917
Chemistry Library (Special).....	38	522
Comstock Memorial Library (Entomology).....	103	2,088
Economics Laboratory Collection.....	—	340
Forestry Library	—	1,881
Flower Veterinary Library.....	364	12,515
Goldwin Smith Hall Library.....	105	3,945
Gray Memorial Library (Electrical Engineering).....	19	866
Hart Memorial Library (English Literature).....	—	4,799
Kuichling Library (Civil Engineering).....	20	2,313
Rockefeller Hall Library (Physics).....	—	1,190
Van Cleef Memorial Library (Medicine).....	154	5,040
Total including manuscripts and maps.....	16,359	844,185
New York State College of Agriculture Library.....	6,032	116,361
New York State College of Home Economics Library.....	878	9,659
Law Library.....	3,528	92,998
Total on entire Campus.....	26,797	1,063,203

Among the important single items acquired by purchase this year for the general library were:

Thomas Aquinas. Opera omnia. ed. Fretti and Mare.....	34 vols.
Corpus medicorum graecorum et latinorum.....	25 vols.
Breviarium Grimani (facsimile) Leyden, 1904-10.....	15 vols.

*Counting by Chinese volumes (ts'e) the additions to the Wason Collection numbered 10,749 and its total holdings are 38,392.

Les très riches heures du Duc de Berry (Heliogravure facsimile)
Paris, 1904.

The following special additions were made to serial publications:

Bishop Museum, Bulletin.....	22 vols.
Thwaite's Western Travels.....	18 vols.
Columbia Contributions to Anthropology.....	15 vols.

Some of the accessions to special collections are worthy of comment. The greatest growth was in the Chinese collection. It is due to the subsidy granted in 1938 by the Rockefeller Foundation to supplement the rich holdings of books in Western languages about China in the Wason Chinese Collection. The number of books in Chinese added through this gift for the past year was 8,863 Chinese volumes (ts'e) in 1,333 Chinese wrapped bindings or cases. Among the 252 titles added to the Icelandic Collection, Professor Hermannsson, Curator of the Collection, points out a facsimile edition of the Arna-Magnaeian Manuscript, containing, among other sagas, that of the discovery of America by the Norsemen.

CATALOGUE DIVISION

Miss Speed, the Head of the Catalogue Division, reports the following figures:

Volumes and pamphlets catalogued.....	16,000
Maps	142
Manuscripts	9
Titles added to catalogue.....	8,892
Typewritten cards added.....	16,698
Printed cards added.....	18,601
Cards added to Library of Congress Depository Catalogue.....	60,525
Additions to cards.....	8,415
Volumes recatalogued.....	485
Cards corrected or dated.....	4,383

CLASSIFICATION AND SHELF DIVISION

The figures reported by Mr. De Grassi for this Division are:

Books classified.....	12,425
Documents	246
Manuscripts	12
Maps	816
Theses	352
Books reclassified	108
Presses moved.....	345
Presses added.....	32

PERIODICALS DIVISION

Miss Leland, Head of the Periodicals Division, reports:

Periodicals currently received	
By subscription.....	1,359
By gift and exchange.....	1,283
Total	2,642
Number of volumes on open shelves.....	3,345
Current periodicals on open shelves.....	651
Issued for brief home use	528
Volumes of periodicals bound.....	3,161

Among new periodicals added to the list this year were:

Acta Brevia Neerlandica de Physiologia, Pharmacologia, Microbiologia e. a.
Avicultural Magazine

Current Biography
 Journal of Documentary Reproduction
 Modern Language Quarterly (Seattle)
 Public Administration
 Review of Educational Research

As in past years, the List of Publications of Faculty Members and Officers of the University, appended to the President's Report, was edited by Miss Leland.

READERS' DIVISION

Mr. Willis, Associate Librarian, in charge of the Reading Room and of Inter-library loans, reports:

Days open to the public.....	341
Registered borrowers:	
Faculty	1,439
Students:	
College year.....	4,013
Summer Session.....	303
Recorded use:	
Reading Room (number of books).....	137,310
Seminary rooms.....	3,057
Stalls	4,473
Laboratories and Departments.....	5,771
Home use (including 14,219 seven-day books and 528 brief loans of periodicals	60,193

INTER-LIBRARY LOANS

Lent to other libraries (volumes).....	1,216
Borrowed from other libraries.....	462

The number of university, college, government, and industrial libraries that borrowed from Cornell was 194. Among them were:

University of Buffalo.....	51	Eastman Kodak Company.....	25
University of Rochester.....	49	Hamilton College.....	23
Syracuse University.....	47	Iowa State University.....	23
Wells College.....	44	Brown University	21
Pennsylvania State College.....	41	University of California.....	17
Agfa Ansco Corporation.....	40	New York State Library.....	16
International Business Machines Corporation	40	New York University.....	15
Hobart College.....	36	University of Chicago.....	13
Princeton University.....	31	Harvard University.....	9
Columbia University.....	26	Yale University.....	6

Cornell borrowed books from 62 other libraries. Among them were:

Library of Congress.....	97	New York State Library.....	15
Columbia University.....	44	University of Michigan.....	8
University of Rochester.....	40	Iowa State College.....	6
Harvard College Library.....	34	University of Minnesota.....	6
Princeton	34	U. S. Army Medical Library....	6
University of Illinois.....	22	Union Theological Seminary....	6
Yale University	21	University of Wisconsin.....	6
University of Chicago.....	19	American Numismatic Society...	5

GIFTS

The names entered on our donors list number 744. Of the 10,878 volumes added to the general library 4,464 were gifts as against 6,414 volumes purchased. The number of periodicals which come to us as gifts (1,283) is notable. To the publishers and editors of these periodicals we are duly grateful. Many

learned societies, foundations, corporations, state and foreign government agencies are donors of long standing in our list. Our debt of gratitude to them grows greater with the years. Among the personal donors, to whom we offer collective and individual thanks, are many members of the faculty and officers of the University. Their continued generosity is a source of gratification to the Librarian as well as to their colleagues and their students.

A valuable gift to the Wason Chinese Collection was the "Ta Ch'ing li ch'ao shih lu" (Veritable records of the Ch'ing dynasty) a photolithographic quarter-size reproduction of state papers and edicts of Ch'ing emperors, who ruled China from 1644 to 1911. The work as described by Miss Gaskill, Curator of the collection, consists of 1,220 volumes in 122 yellow brocade cases. It was published by the government of Manchoukuo in 1937, and Cornell received its copy through the kind offices of Mr. Cabot Coville, of the Class of 1923, Secretary of the American Embassy in Tokyo, in answer to an appeal from Professor Biggerstaff.

Professor Broughton, Curator of the Wordsworth Collection was enabled to add, through the generous aid of Mr. Victor Emanuel, Class of 1919, letters in Wordsworth's hand, at least three of which are unpublished, association books from Wordsworth's library, including Wordsworth's own copy of the Bishops' Bible (1585), a large and miscellaneous package of Coleridge manuscripts, and a long letter from Edward Everett to Henry Taylor on Wordsworth's death and fame.

Mr. Russell Tarr of the Class of 1915 gave to the University the library of his father, the late Ralph S. Tarr, Professor of Physical Geography at Cornell. It consisted of 980 bound volumes and a large number of pamphlets and maps mostly on geology and geography. From the estate of the late Professor Charles H. Hull, through the courtesy of Miss Mary Hull, we received numerous documents and maps connected with local and with general American history.

As in past years Mr. and Mrs. William F. E. Gurley have donated many additions, chiefly to our collection of Shakespeareana. The Hon. William Sulzer and Mr. Carter Kingsley have likewise continued their donations.

Professor Morris Bishop has repeated his gift of \$100 and given a number of books in addition. Mr. Elmer Johnson again sent us a check for \$15. Mr. Henry R. Ickelheimer sent \$63.50 to enable us to continue his former gifts of the earlier volumes of Venturi's "Storia dell' Arte", and Mrs. Louise F. Peirce added \$36 to her gifts of past years.

OTTO KINKELDEY,
Librarian.

APPENDIX XXIII

PUBLICATIONS 1939-40

The University Library keeps alphabetically arranged the publications of University Officers, so far as received at the Library, and for this purpose copies are solicited. Omissions in the following list are due to incomplete information.

- Cornell University.** Official publication. v. 31, 1939-40.
Cornell University. Agricultural Experiment Station. Bulletin. Ithaca, N. Y. No. 716, 719-727, 732, 1939-40.
 ———— Memoir. Ithaca, N. Y. No. 225-227, 229-30, 1939-40.
Cornell University. College of Architecture. Report of the Dean. 1938-39. *Cornell University. Off. pub. v. 31, no. 1. App. X. 1939.*
Cornell University. College of Arts and Sciences. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. III. 1939.*
Cornell University. College of Engineering. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. XI. 1939.*
Cornell University. Director of Admissions. Report. 1938-39. *Ibid. v. 31, no. 1. App. XV. 1939.*
Cornell University. Director of Physical Education and Athletics. Report. 1938-39. *Ibid. v. 31, no. 1. App. XVIII. 1939.*
Cornell University. Director of Extramural Courses. Report. 1938-39. *Ibid. v. 31, no. 1. App. XXI. 1939.*
Cornell University. Law School. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. IV. 1939.*
Cornell University. Dean of Women. Report. 1938-39. *Ibid. v. 31, no. 1. App. XIV. 1939.*
Cornell University. Department of Hygiene and Preventive Medicine. Report. 1938-39. *Ibid. v. 31, no. 1. App. XIX. 1939.*
Cornell University. Department of Military Science and Tactics. Report. 1938-39. *Ibid. v. 31, no. 1. App. XX. 1939.*
Cornell University. Graduate School. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. II. 1939.*
Cornell University. Graduate School of Education. Report of the Director. 1938-39. *Ibid. v. 31, no. 1. App. XII. 1939.*
Cornell University. Library. Report of the Librarian. 1938-39. *Ibid. v. 31, no. 1. App. XXII. 1939.*
 ———— Publications (by Cornell University and its officers). 1938-39. *Ibid. v. 31, no. 1. App. XXIII. 1939.*
Cornell University. Medical College. Report of the Dean of the Medical College. 1938-39. *Ibid. v. 31, no. 1. App. V. 1939.*
Cornell University. President. Annual Report. 1938-39. *Ibid. v. 31, no. 1. 1939.*
Cornell University. Registrar. Report. 1938-39. *Ibid. v. 31, no. 1. App. XVI. 1939.*
Cornell University. Summer Session. Report of the Administrative Board. 1938. *Ibid. v. 31, no. 1. App. XIII. 1939.*
Cornell University. University Faculty. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. I. 1939.*
Cornell University. University Placement Bureau. Report. 1938-39. *Ibid. v. 31, no. 1. App. XVII. 1939.*
New York State College of Agriculture. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. VII. 1939.*
New York State College of Home Economics. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. IX. 1939.*
New York State Veterinary College. Report of the Dean. 1938-39. *Ibid. v. 31, no. 1. App. VI. 1939.*
New York State Agricultural Experiment Station. Report of the Director. 1938-39. *Ibid. v. 31, no. 1. App. VIII. 1939.*
New York State Agricultural Experiment Station. Geneva, N. Y. Bulletin 686-690. 1939-40.

- Circular 186-189. 1939-40.
 —Technical bulletin. 252. 1940.
- Areopagus.** Ithaca, N. Y. v. 8. 1939-40.
- Cornell alumni news.** Ithaca, N. Y. v. 42. 1939-40.
- Cornell countryman.** Ithaca, N. Y. v. 37. Oct., 1939-June, 1940.
- Cornell daily sun.** Ithaca, N. Y. v. 60, 1939-40.
- Cornell engineer.** Ithaca, N. Y. v. 5. Oct., 1939-May, 1940.
- Cornell extension bulletin.** Ithaca, N. Y. No. 414-436. 1939-40.
- Cornell junior extension bulletin.** Ithaca, N. Y. No. 59. 1939.
- Cornell law quarterly:** published by the faculty and students of the Cornell Law School. Ithaca, N. Y. v. 25. December, 1939-June, 1940.
- Cornell quarterly.** Ithaca, N. Y. v. 1. December, 1939-May, 1940.
- Cornell rural school leaflet.** Ithaca, N. Y. v. 33. September, 1939-March, 1940.
- Cornell Society of Hotelmen.** Bulletin. Ithaca, N. Y. v. 12, no. 3.-v. 13, no. 2. 1939-40.
- Cornell University. Engineering Experiment Station.** Bulletin. Ithaca, N. Y. No. 26. 1939.
- Cornell University. Engineering Experiment Station.** Reprint. Ithaca, N. Y. Nos. 3-6. 1939-40.
- Cornell veterinarian.** Ithaca, N. Y. v. 29. 1939.
- Cornellian.** Ithaca, N. Y. v. 72. 1940.
- Farm economics.** Ithaca, N. Y. No. 114-119. 1939-40.
- Hotel news.** Ithaca, N. Y. v. 2. Sept., 1939-May, 1940.
- Islandica.** Ithaca, N. Y. v. 28. 1940.
- Philosophical review.** New York, Longmans, Green and Co. v. 48. 1939.
- Widow.** Ithaca, N. Y. v. 46. 1939-40.
- Agnew, R. P.** On oscillations of real sequences and of their transforms by square matrices. *Amer. journ. math.* v. 41 (1939): 683-699.
- On Tauberian theorems for double series. *Ibid.* v. 62 (1940): 666-672.
- Properties of generalized definitions of limit. *Amer. Math. Soc. Bull.* v. 45 (1939): 689-730.
- On translations of functions and sets. *Ibid.* v. 46 (1940): 525-530.
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- Soil for delphiniums and lupines. *Gardeners' chron. Amer.* v. 43, no. 7 (1939): 219-230.
- Colleges contribute to horticulture. *Ibid.* v. 43, no. 10 (1939): 307-308.
- Autumn for roses. *House beautiful* v. 81 (Sep., 1939): 60, 71-72.
- Rose points. *Ibid.* v. 82 (Je., 1940): 62, 79-80.
- Protecting your garden. *N. Y. sun* (Nov. 18, 1939): 33.
- Production cost records necessary to guide operations. *Florists' revw.* v. 85, no. 2195 (1939): 11-14.
- Mulch aids the plant. *N. Y. times Ann. garden sect.* (Mar. 10, 1940): 18.
- Continued rose research at Cornell. *Amer. rose ann.* (1940): 63-68.
- Where do the rose roots go? *Ibid.* (1940): 68-73.
- The rose watering problem. *Ibid.* (1940): 73-76.
- Anderson, A. L.** Geology and ore deposits of the Atlanta district, Elmore County, Idaho. *Idaho Bur. Mines & Geol. Pamph.* no. 49 (1939) 71 p.
- Geology and metalliferous deposits of Kootenai County, Idaho. *Ibid.* no. 53. (1940): 67 p.
- Aikinite and silver enrichment at the St. Louis Mine, Idaho. *Econ. geol.* v. 35 (1940): 520-533.
- Anderson, H. R.** A necessary precaution in diagnostic testing. *School revw.* v. 47 (1939): 515-526.

- An experimental program in social studies for grades I to XII. *Nat. Council Soc. studies. The future of the soc. studies* (1939): 6-18.
- Selected test items in American history. H. R. Anderson and others. *Natl. Council. Soc. Studies. Bull. no. 6* (April, 1940): 93 p.
- The National Council for the Social Studies. *Kansas teacher & western school journ. v. 48* (1939): 72.
- Anderson, O. D.** Some cardiovascular manifestations of the experimental neurosis in sheep. O. D. Anderson and others. *Psychosomatic med. v. 1* (1939): 93-100.
- Two cases of experimental neurosis in dogs of known genetic constitution. *Amer. journ. physiol. v. 126* (1939): 421.
- The spontaneous neuro-muscular activity of various pure breeds of dog and of interbreed hybrids of the first and second generation. *Ibid. v. 126* (1939): 422.
- Anderson, W. A.** Natural increase in New York State population. *Cornell Univ. Agric. Exp. Sta. Bull. 733* (May, 1940): 24 p.
- The transmission of farming as an occupation. *Rural sociol. v. 4, no. 4* (Dec., 1939): 433-448.
- Andrus, W. DeW.** Quantitative study of effect of transfusion of blood on plasma prothrombin. W. DeW. Andrus and others. *Soc. Exp. Biol. & Med. Proc. 41* (1939): 98.
- Lipid amino nitrogen content of the blood in diseases of the liver and of the biliary tract. W. DeW. Andrus and R. A. Moore. *Arch. surg. v. 39* (Jul., 1939): 3.
- Contusions, crushing injuries and wounds of the thorax. W. DeW. Andrus and C. W. Holman. *Amer. journ. surg. v. 46* (Dec., 1939): 542.
- The effect of hepatectomy on the plasma prothrombin and the utilization of vitamin K. W. DeW. Andrus and others. *Surg. v. 6* (Dec., 1939): 899-900.
- Studies on the fate of plasma prothrombin. W. DeW. Andrus and others. *Science v. 91* (Jan., 1940): 2350.
- Correction of prothrombin deficiencies by means of 2-methyl-1, 4-naphthoquinone injected intramuscularly. W. DeW. Andrus and J. W. Lord, jr. *Amer. Med. Assoc. Journ. v. 114* (Apr., 1940): 1336.
- Angevine, D. M.** Experimental arthritis in rabbits produced with streptococci and other organisms. R. L. Cecil and others. *Amer. journ. med. sciences v. 198* (1939): 463-475.
- Significance of the synovial villus and the ciliary process as factors in the localization of bacteria in the joints and eyes of rabbits. D. M. Angevine and Sidney Rothbard. *Journ. exp. med. v. 71* (1940): 120-136.
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- Notes on telephoto manipulation in the field. *Ibid. v. 7, no. 4* (Je., 1939): 156-58.
- A practical operating stand. *Science v. 90, no. 2323* (Jul. 7, 1939): 22.
- Asdell, S. A.** Goat research in 1938. *Brit. Goat Soc. Year book* (1939): 87-92.
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